

2016-17

NCBIOTECH Company Directory

ncbiotech.org/directory



NCBIOTECH Company Directory 2016-17



North Carolina Biotechnology Center

Chairman, Board of Directors
John L. Atkins, III, FAIA

President and Chief Executive Officer
Doug Edgeton, MPH, MBA

Senior Vice President,
Science and Business Development
Kenneth R. Tindall, Ph.D.

Senior Vice President,
Statewide Operations and Economic Development
William O. Bullock, MBA

REGIONAL OFFICES

Executive Director, Eastern Office
Mark Phillips

Executive Director, Greater Charlotte Office
Corie Curtis

Executive Director, Piedmont Triad Office
Nancy Johnston

Executive Director, Southeastern Office
Randall Johnson, MBA

Executive Director, Western Office
Jonathan Snover, Ph.D.



Bulldozers and hardhats are again part of the landscape as the \$1.8 billion expansion gets under way at the Novo Nordisk biomanufacturing plant in Clayton. It's the largest single manufacturing investment in North Carolina history, doubling the current 700-person workforce that produces diabetes medicines for use worldwide. The North Carolina Biotechnology Center helped the Danish company with its initial 1991 decision to locate a facility in the state, bringing high-paying jobs to Johnston County.



NCBiotech Company Directory is produced by Old North State Magazines, LLC
145 W Pennsylvania Ave, Southern Pines, NC 28387. Telephone 910-692-7271. Fax 910-692-9382.
Editorial content provided by NCBiotech Library. All rights reserved. The contents of this publication may not be reproduced by any means, in whole or in part, without prior written consent of Old North State Magazines, LLC and the North Carolina Biotechnology Center.



NCCU Biomanufacturing Research Institute and Technology Enterprise (BRITE)

Transforming Students Into Qualified Scientists
in drug discovery and biomanufacturing (B.S., M.S., Ph.D.).

Ready To Work, Day One.



NORTH
CAROLINA
CENTRAL
UNIVERSITY
FOUNDED 1910

BIOMANUFACTURING
RESEARCH INSTITUTE
AND TECHNOLOGY
ENTERPRISE

For more information, visit nccu.edu/BRITE or call 919-530-6845 / Durham, NC

Supported by the Golden LEAF Foundation

NCBiotech's Regional Offices



Advantage North Carolina

North Carolina's 600+ companies enjoy outstanding quality of life in addition to:

- Skilled Workforce
- Collaborative Community
- Low Business Costs

Top Regional Biotechnology Assets

EASTERN

Regional Office: Greenville
Phone: 252-328-9981

Sector Strengths:

- Ag Biotech
- Functional Biofuels
- Marine Biotech

ncbiotech.org/east

PIEDMONT TRIAD

Regional Office: Winston-Salem
Phone: 336-725-6672

Sector Strengths:

- Regenerative Medicine
- Nanobiotechnology
- Medical Devices

ncbiotech.org/triad

SOUTHEASTERN

Regional Office: Wilmington
Phone: 910-763-5747

Sector Strengths:

- Marine Biotech
- Contract Research
- Pharmaceuticals and Nutraceuticals

ncbiotech.org/southeast

GREATER CHARLOTTE

Regional Office: Charlotte
Phone: 704-687-8563

Sector Strengths:

- Bioinformatics
- Health and Nutrition
- Biomedical Technologies

ncbiotech.org/charlotte

RESEARCH TRIANGLE PARK

Headquarters: Research Triangle Park
Phone: 919-541-9366

Sector Strengths:

- Biomanufacturing
- Contract Research
- Ag Biotech

ncbiotech.org

WESTERN

Regional Office: Asheville
Phone: 828-290-1431

Sector Strengths:

- Medical Devices
- Natural Products
- Fermentation

ncbiotech.org/west

Cover Photos (front and back cover top to bottom) :

FC: DSM, NCCU, NCSU NCBiotech, NCCU; BC: GSK, Duke Research Lab, High Point University, NCBiotech, Fullerton Genetics.

This listing of Bioscience companies is current as of April 2016.

COMPANIES 1 – An

108Labs LLC (*Research Triangle Park*) uses cell-based synthesis to produce textile, food and building commodities.

www.cellufacturing.net

13C Molecular Inc. (*Fayetteville*) provides stable-isotope labeled and native compounds to the pharmaceutical and biomedical industries via custom organic synthesis and sourcing through a consortium of manufacturers.

www.13cmolecular.com

1st Order Pharmaceuticals (*Research Triangle Park*) is a development-stage pharmaceutical company focused on advancing 1OP-2198, an IND-ready small molecule potassium channel opener (KCNQ2/3), for unmet medical and orphan indications in neurology and neuro-ophthalmology.

www.1storderpharma.com

A&C American Chemicals Ltd. (*Raleigh*) manufactures and distributes pharmaceutical excipients, APIs, reagents, nutraceutical ingredients, reference standards and specialty chemicals and solvents. The Raleigh location is a business development office.

www.acamchem.com

A1 BioChem Labs LLC (*Wilmington*) offers chemistry services to universities, pharma, agrochemical and biotech industries. Services include custom synthesis of APIs and novel compounds, catalog compound services, route screening, lead optimization and chemical sourcing.

www.a1biochemlabs.com

AbD Serotec, a Bio-Rad Company, (*Raleigh*) designs, manufactures and sells immunological and cell biology reagents for research, and provides antibody services.

www.abdserotec.com

Accord Healthcare Inc. (*Durham*) develops and manufactures generic pharmaceuticals. Their portfolio includes therapeutics in oncology, cardiology, neurology, nephrology, urology, psychiatry, diabetes and pain management.

www.accord-healthcare.com

AccuGenomics Inc. (*Wilmington*) develops gene expression tests to diagnose and monitor cancer treatment.

www.accugenomics.com

Achelos Therapeutics Inc. (*Chapel Hill*) develops topical therapeutics for the treatment of migraine and peripheral pain.

www.achelios.com

ACRIS Pharmaceuticals LLC (*Research Triangle Park*) develops and commercializes unique early stage compounds.

www.acrispharma.com

Adhezion Biomedical LLC (*Hudson*) develops and produces cyanoacrylate-based medical adhesive, wound care and microbial barrier products for connective tissue (human skin).

www.adhezion.com

Adroit Pharmaceutical Development LLC (*Durham*) identifies new and improved formulations and process technologies. Its primary focus is on inhalation and dermatological product development.

www.adroitpharmdev.com

Advanced Animal Diagnostics Inc. (*Morrisville*) develops and commercializes diagnostics to detect and manage disease states, reproductive, nutritional and overall health status of production animals. AAD's first product is a diagnostic test for mastitis in dairy cows.

www.qscoutlab.com

Advanced Laboratories Inc. (*Clayton*) provides chemical and microbiological analysis of dietary supplements and food products.

www.advancedlabsinc.com

Advanced Tear Diagnostics LLC (*Raleigh*) develops and markets a point-of-care lab testing system designed to assist eye care physicians in detecting and quantifying biomarkers associated with external ocular disorders.

www.teardiagnosics.com

AegisCN LLC (*Durham*) develops technologies and treatments targeting neurological diseases and inflammation.

Aegis Surgical Ltd. (*Durham*) is developing a less invasive access system that facilitates percutaneous transaortic transcatheter aortic valve replacement (pTAO-TAVR).

Aerie Pharmaceuticals Inc. (*Research Triangle Park*) discovers, develops and commercializes first-in-class therapies for the treatment of patients with glaucoma.

www.aeriepharma.com

Aerocrine Inc. USA (*Morrisville*) designs and develops products to aid in the diagnosis and control of respiratory disease.

www.aerocrine.com

Affinergy LLC (*Durham*) uses biotechnology methods to create application-specific coatings for orthopedic and cardiovascular medical devices. Affinergy discovers peptides that can capture, deliver and retain specific proteins, drugs or cells.

www.affinergy.com

AgBiome Inc. (*Research Triangle Park*) conducts discovery and early-stage research using the crop microbiome to identify products that reduce risk and improve yields.

www.agbiome.com

Agile EndoSurgery Inc. (*Research Triangle Park*) develops endoscopic surgical devices.

www.agileendosurgery.com

Agile Sciences Inc. (*Raleigh*) has identified small molecules that inhibit and disperse bacterial biofilms. The company is investigating applications in medicine, agriculture and industry.

www.agilesci.com

Ajinomoto North America (*Raleigh*) manufactures pharmaceutical-grade amino acids and custom-blended amino acid mixtures.

www.ajiaminoscience.com

Akros Medical Inc. (*Durham*) develops orthopedic medical devices.

www.akrosmedical.com

Alcami Corporation (*Wilmington and Durham*) provides contract drug development and manufacturing services, including formulation development, analytical chemistry and solid dose and parenteral drug manufacturing for both clinical and commercial markets.

www.alcaminow.com

Alderon BioSciences Inc. (*Beaufort*) develops point-of-care diagnostics.

Life science economic activity contributes \$73 billion to N.C.'s economy.

Alera Labs LLC (Durham) provides contract research analytical chemistry, in vitro toxicology, GLP analysis and preformulation services to pharmaceutical, biotech and medical device companies.

www.aleralabs.com

Algaen Corp. (Winston-Salem) is exploring microalgae to develop, produce and market products and technologies for the nutraceutical, pharmaceutical and bio-energy industries.

www.algaen.com

Alganomics LLC (Southport) is researching and developing algae-culturing systems to create bioproducts, including biofuels.

www.algaeresource.com

Algynomics Inc. (Chapel Hill) uses phenotyping and genomics to develop diagnostics and therapeutics for chronic pain and related conditions.

www.algynomics.com

Alion Science and Technology Inc. (Durham) provides toxicology research, animal husbandry, inhalation engineering and biochemistry services. Alion operates four bioscience research laboratories in the Triangle.

www.alionscience.com

Allergy Partners Extract Laboratory

(Asheville) produces extracts that are used to treat allergic disease, asthma and immunology.

www.allergypartners.com

Almac Clinical Services LLC (Durham)

provides clinical trial material manufacturing, packaging and distribution services.

www.almacgroup.com/clinical-trial-supply

Almac Diagnostics LLC (Durham)

offers services for biomarker discovery, assay development/validation/testing, and companion diagnostic co-development. Testing platforms include NGS, Microarray, qPCR and IHC. Regulatory and bioinformatics consulting services are also available.

www.almacgroup.com/diagnostics

ALP Life Sciences LLC (Black Mountain)

develops diagnostics and therapeutics for liver diseases and related inflammatory diseases.

www.alplifesciences.com



AlphaSyx Therapeutics Inc. (Winston-Salem) develops therapeutics targeting the alpha6-containing receptor to treat addictions and movement disorders.

www.alphasyx.com

Alrgn Bio Inc. (Greensboro) provides reduced allergen peanuts to food producers via post-harvest bio-processing. Alrgn's patented, food-grade enzymatic process inactivates major allergens found in peanuts and peanut products.

www.alrgnbio.com

American Distillation Inc. (Leland)

manufactures industrial-grade ethyl alcohol and offers contract manufacturing services such as distillation, dehydration, reaction, carbon treating and blending.

www.americandistillation.net

Andersen Products Inc. (Haw River) sells and services the Anprolene and EOGas lines of 100% ethylene oxide gas sterilizers. They also provide contract packaging and sterilization services for device manufacturers.

www.anpro.com

Andersen Scientific Inc. (Morrisville) provides ethylene oxide sterilization and validation services for packaging and devices. Andersen's sterilization cycles include microbiological and other testing.

www.ansci.us

Annias Immunotherapeutics Inc. (Chapel Hill) is developing a therapeutic vaccine for the treatment of malignant brain tumors.

www.anniasimmuno.com

Antech Diagnostics Inc. (Morrisville) provides clinical and veterinary hematology analysis, clinical chemistry, urinalysis and coagulation testing.

www.antechglp.com

Anuva Innovations Inc. (Morrisville) is an ISO13485-certified medical device design firm that provides documentation, mechanical/human factor design, software development, manufacturing, logistics, repair and testing services, with expertise in drug delivery and monitoring devices.

www.anuva.com



Appealing Products Inc. (*Raleigh*) develops products for forensics and personal protection from toxic materials such as inorganics, gases and poisons in foods, animal feeds and liquids.
www.appealingproducts.com

Apple Pharms Ingredients Inc. (*Asheville*) discovers natural bioactive ingredients and functional foods for nutritional and medicinal purposes. Apple Pharms also provides contract development and drug discovery services.
www.applepharms.squarespace.com

Applied Catheter Technologies Inc. (*Winston-Salem*) develops drug-coated medical devices that inhibit scar formation. The company's first products under development are catheters for male urethral stricture and devices which inhibit abdominal adhesions.
www.appliedcatheter.com

Arbiom Inc. (*Raleigh*) develops technologies that convert residues from agriculture and forestry into the intermediates required for the production of biofuels, biomaterials and green chemicals.
www.arbiom.com

Arcato Laboratories Inc. (*Durham*) develops specialty oral healthcare products. Its first product is a sustained-release medicated wax that treats oral discomfort caused by orthodontic appliances.
www.arcatolabs.com

Archer Daniels Midland Co. (*Southport*) makes citric acid and salts of citric acid used in soft drinks, food products and detergents. They also make yeast mannan as an animal feed ingredient.
www.adm.com

Ardeal Pharma Inc. (*Brevard*) is a virtual pharma company developing patented stabilized sulforaphane for the dermal pharmaceutical and cosmetic markets.

Ardeal Research Institute (*Brevard*) is a non-profit organization that develops drug discovery capabilities of the natural resources in Western North Carolina. The institute has collaboration agreements in place with Brevard College and the N.C. Arboretum.

Argos Therapeutics Inc. (*Durham*) develops immunotherapy treatments for cancer, HIV and autoimmune disorders.
www.argostherapeutics.com

Aristos Pharmaceuticals Inc. (*Cary*) provides generic medications for various therapeutic classes. Aristos Pharmaceuticals offers a full range of commercialization capabilities for generic pharmaceuticals spanning wholesale, specialty and direct distribution.
www.chiesiusa.com/products/aristos-pharmaceuticals-inc/

ARK Research LLC (*Mebane*) provides contract research services supporting crop protection products. Services include GLP-compliant regulated biotechnology trials, efficacy testing and residues testing.
www.arkresearch.com

Array BioPharma Inc. (*Morrisville*) develops targeted, small-molecule drugs to treat cancer and inflammatory diseases.
www.arraybiopharma.com

ArrayXpress Inc. (*Raleigh*) applies bioinformatics to optimize bioprocesses, increase diagnostic efficiency and provide contract research services, focusing on next generation genomics.
www.arrayxpress.com

Arrivo BioVentures LLC (*Morrisville*) accelerates biologics and small molecules from IND/phase one through proof of concept.
www.arrivobio.com

Arysta LifeScience North America LLC (*Cary*) develops and manufactures crop protection products.
www.arysta-na.com

Asinex (*Winston-Salem*) designs small-molecule libraries and provides lead optimization, custom synthesis and other chemistry services.
www.asinex.com

Asklepios Biopharmaceutical Inc. (*Chapel Hill*) develops protein- and cell-based therapies using a proprietary technology platform called Biological Nano Particles (BNP).
www.askbio.com

Aspir-Tek Inc. (*Rocky Mount*) makes Aquaprin, an FDA-approved water-soluble aspirin.
www.aspir-tek.com

Asymchem Laboratories (*Morrisville*) provides contract chemical- and drug-manufacturing services. Asymchem's administrative headquarters is in North Carolina and its manufacturing plants are in China.
www.asymchem.com

ATEX Technologies Inc. (*Pinebluff*) designs, develops and manufactures medical textiles and component solutions for the medical industry.
www.atextechnologies.com

Atlantic Medical Inc. (*Wrightsville Beach*) develops nutraceutical products and devices to address ocular diseases.

Atlas Regeneration Inc. (*Winston-Salem*) develops bioinformatics platforms for drug discovery related to regenerative medicine and stem cell research. Atlas Regeneration also screens drugs in silico for drug repositioning.
www.atlasregeneration.com

AtriCure Inc. (*Morrisville*) is developing a cardiac coagulation device for the endoscopic treatment of cardiovascular arrhythmias, including atrial fibrillation.
www.atricure.com

Attagene Inc. (*Morrisville*) has developed a pathway profiling technology to evaluate the impact of pharmaceuticals and environmental chemicals on over 100 transcription factors and 48 nuclear receptors.
www.attagene.com

Avazyme Inc. (*Research Triangle Park*) provides field and GLP laboratory testing for sectors including agchem, agbiotech, food and beverage producers and retailers, brewers and distillers. Capabilities include analytical and immunochemistry, microbiology and molecular biology.
www.avazyme.com

Avertica Inc. (*Research Triangle Park*) develops compounds and polymers for electronic device applications, including the development of biomimetic and bio-based electronic materials.
www.averticainc.com

Avioq Inc. (*Research Triangle Park*) develops and manufactures diagnostic assays and equipment for detecting infectious diseases. Products include HIV-1 and HTLV-I/II assays, biomaterials for HIV research and labware. Avioq also offers contract assay development and manufacturing.
www.avioq.com

Avista Pharma Solutions (*Durham*) provides contract development and manufacturing services, with expertise in process chemistry, analytical chemistry, novel drug manufacturing and animal health services.
www.avistapharma.com

Avoca Inc. (*Merry Hill*) develops and manufactures botanical extraction products, and provides extraction services. Avoca contracts with farmers to grow clary sage, and also processes krill oil for omega-3 fatty acids.
www.pharmachemlabs.com/divisions/avoca

Azzur Labs LLC (*Cary*) provides analytical GXP compliant testing services for the pharmaceutical, medical device, food and cosmetic industries.
www.azzur.com/labs

Baebies Inc. (*Durham*) develops and provides newborn screening, pediatric testing and health management products based on digital microfluidics and other technology.
www.baebies.com

Ballantyne Therapeutics Inc. (*Charlotte*) is a specialty pharmaceutical company developing products for neurodegenerative disorders and related indications.

Bamboo Therapeutics Inc. (*Chapel Hill*) develops gene therapies to treat rare genetic central nervous system (CNS) and neuromuscular diseases, including Giant Axonal Neuropathy (GAN), Canavan Disease, Friedreich's Ataxia and Duchenne Muscular Dystrophy (DMD).
www.bambootherapeutics.com

Banner Life Sciences (*High Point*) the products and technologies division of Patheon, researches, develops and produces gelatin-based oral dosage pharmaceutical products.
www.bannerls.com

Barbaresco Pharma LLC (*Chapel Hill*) is a target drug discovery company focused on obesity, cardiovascular and metabolic diseases.

BaseTrace (*Research Triangle Park*) develops DNA-based industrial fluid tracers for environmental monitoring and process optimization in the energy sector.
www.basetrace.com

BASF Corp. (*Research Triangle Park*) develops plant health products and seed treatments, and conducts plant biotechnology research with a focus on yield and quality traits in major crops. Business units in RTP include the crop protection and plant science groups.
www.basf.com/plantscience

Baxter Healthcare Corp. (*Marion*) produces intravenous and peritoneal dialysis solutions, as well as empty containers and component parts for other Baxter facilities.
www.baxter.com

Bayer (*Research Triangle Park, Clayton and Pikeville*) uses the tools of plant biotechnology to develop seeds and products for crop protection and nonagricultural pest control. The Clayton site performs pesticide research, specifically in turfgrasses and ornamentals. The Pikeville site identifies, tests and develops new cotton and soybean varieties.
www.bayercropscience.us

BD Diagnostics (*Burlington, Durham and Mebane*) develops and commercializes molecular diagnostic products for various cancers, including cervical, breast, ovarian and prostate.
www.bd.com/tripath

BD Technologies (*Research Triangle Park*) develops technologies for parenteral drug delivery, advanced diagnostics, smart medical devices, cellular and genomics and external innovation programs. The RTP site is BD's corporate technology R&D and innovation center.
www.bd.com/technologies

Beeken BioMedical LLC (*Raleigh*) develops and commercializes hemostasis wound dressings and polymer-based liquid bandage products.
www.beekenbiomedical.com

COMPANIES Be – Bi

BENANOVA Inc. (*Raleigh*) develops antimicrobial nanotechnology products for the disinfectant, cosmetic, and agricultural industries.
www.benanova.com

Benson Hill Biosystems Inc. (*Research Triangle Park*) is an agricultural biotechnology company focused on the development of traits to increase crop yield, principally by improving photosynthesis.
www.bensonhillbio.com

Bent Creek Institute Inc. (*Asheville*) conserves and develops plant biodiversity assets and maintains the North Carolina Arboretum's Bent Creek Germplasm Repository. It also administers the U.S. Botanical Safety Laboratory, a consortium of university botanical research sites.
www.bentcreekinstitute.org

BestCo Inc. (*Mooresville*) manufactures confectionery-based dosage forms for nonprescription drug products and dietary supplements.
www.bestco.com

BHV Pharma Inc. (*Research Triangle Park*) develops therapeutics for metabolic disorders, including Type 2 diabetes and liver disease (NAFLD/NASH).
www.bhvpharma.com

BindusChem LLC (*Research Triangle Park*) provides contract drug discovery and process chemistry services. Services include synthesis of small molecules for SAR study, focused arrays and scaffolds, chemical development, route scouting, and process optimization and validation.
www.binduschem.com

Bio Products Laboratory USA Inc. (*Durham*) manufactures and distributes plasma-derived products, including intravenous immunoglobulin preparations, coagulation factors and albumin solution. The Durham office is the U.S. distributor for BPL products.
www.bpl-us.com

BioAgilytix Labs Inc. (*Durham*) is a bioanalytical lab specializing in large-molecule bioanalysis, offering PK, immunogenicity, biomarkers and cell-based assays in support of the development and release testing of biologics and small-molecule therapeutics.
www.bioagilytix.com

BioCI Systems Inc. (*Raleigh*) provides sterilization validation services and other contract laboratory testing services.
www.bioci.com

Biocomposites Inc. (*Wilmington*) develops, manufactures and distributes synthetic tissue regeneration products. The Wilmington office is a sales office.
www.biocomposites.com

BioCryst Pharmaceuticals Inc. (*Durham*) designs and develops novel, small-molecule oral drugs that block key enzymes to treat rare diseases.
www.biocryst.com

BioCytics Inc. (*Huntersville*) offers circulating tumor cell isolation, enumeration and analysis services for oncology drug development and research. They also have an ongoing IRB-approved clinical trial for the collection of blood and tissue samples from cancer patients.
biocytics.com

BioDelivery Sciences International Inc. (*Raleigh*) is a specialty pharmaceutical company with a focus in the areas of pain management and addiction. The company's lead products utilize a buccal film delivery system.
www.bdsi.com

BioDeptronix LLC (*Chapel Hill*) develops instruments to sense and monitor toxic chemicals and gases in outdoor and indoor air, as well as in lab-created air samples, using changes in the metabolism and genome expression of living human cells.

BioDyne Water Reclamation Inc. (*Raleigh*) engineers and provides water reclamation systems using biotreatment with its patented IBAC single vessel full-treatment systems.
www.biodynegroup.com

Biofluidica Inc. (*Chapel Hill*) is developing novel instrumentation for the isolation and analysis of circulating biomarkers, including circulating tumor cells, in cancer patients.
www.biofluidica.com

BioGaia Biologics Inc. (*Raleigh*) develops and sells probiotic products.
www.biogaia.com

Biogen (*Research Triangle Park*) discovers, develops and manufactures therapies for neurodegenerative diseases, hemophilia and autoimmune disorders. It operates biologics and oral solid dose manufacturing facilities and a patient services contact center in RTP.
www.biogen.com

BioGenomics LLC (*Knightdale*) provides pharmacogenomic testing to inform prevention, diagnosis and treatment of various diseases.
www.biogenomicsdx.com

BioGreen Synergy Inc. (*Greensboro*) manufactures, grows and provides algae-based products for use in alternative renewable energies, USDA, non-USDA and chemical markets.
www.biogreensynergy.com

BioKier Inc. (*Chapel Hill*) develops proprietary drugs for diabetes and related disorders. BioKier has identified a therapeutic opportunity based on gastric bypass surgery and is developing a novel treatment for diabetes.
www.biokier.com

BioLink Life Sciences Inc. (*Cary*) provides contract product development support through custom synthesis and testing.
www.biolinkonline.com

Biological Applied Research Inc. (*Raleigh*) provides efficacy testing of agricultural chemicals such as fungicides and nematicides on various crops, including fruit and vegetables.
www.biologicalappliedresearch.com

BioLume Inc. (*Wendell*) develops and commercializes marine-derived bioluminescent (light-producing) proteins for the food, beverage, cosmetic and diagnostic imaging markets.
www.biolume.net

BioMarck Pharmaceuticals Ltd. (*Durham*) develops drugs to treat pulmonary diseases and disorders, such as chronic obstructive pulmonary disease, ARDS, cystic fibrosis and lung cancer.
www.biomarck.com

bioMASON (*Research Triangle Park*) develops masonry material from a nonpathogenic bacterium which induces cement materials in between aggregates such as sand.
www.biomason.com

BioMedica USA LLC (*Durham*) develops rapid and portable diagnostic systems and biosensor systems for point-of-care platforms in blood coagulation, clinical immunology and drug monitoring.

www.biomedicausa.com

BioMedomics Inc. (*Morrisville*) develops rapid molecular diagnostic assays and technologies.

www.biomedomics.com

bioMérieux Inc. (*Durham*) develops in vitro products to diagnose infectious diseases, cancer and cardiovascular disease and to detect micro-organisms in agri-foods, pharmaceuticals and cosmetics.

www.biomerieux-usa.com

bioMONTR Labs (*Research Triangle Park*) provides a broad range of CLIA-certified high-complexity laboratory testing, including assay/IVD protocol development, validation design, performance evaluation testing, drug trials and collaborative studies, and regulatory/quality control.

www.biomontr.com

Bio-Pro Research LLC (*Hickory*) manufactures and distributes bio-enzymatic products for stain and odor removal.

www.urineoff.com

Bioptigen Inc., a Leica Microsystems company, (*Morrisville*) develops optical coherence tomography systems for preclinical eye disease research and clinical diagnosis.

www.leica-microsystems.com/products/optical-coherence-tomography-oct/

BioResource International Inc. (*Durham*) discovers, develops and manufactures enzyme feed additives that increase the digestibility of animal feeds for poultry and swine production.

www.briworldwide.com

Biorg Inc. (*Winston-Salem*) is developing and commercializing organoid technology for use in life science applications such as diagnostics, drug screenings and toxicology.

www.biorg.com

BioRxn LLC (*Chapel Hill*) develops NMR-based metabolomic technology, including bioreactor and artificial liver systems, for non-invasive monitoring of metabolic biomarkers. BioRxn also provides conventional metabolomic services.

www.biorxn.com

More than 63,000 North Carolinians work in the life sciences statewide, earning an average salary of \$81,000 a year – about twice that of overall private sector earnings in the state.

North Carolina has more than 600 life science companies statewide: 110+ in production and manufacturing, 130+ in contract research and testing, 360+ in R&D and more than 20 others in specialized categories.



BEAN THINKING OF BIGGER YIELDS?
ASK FOR THE SMARTER SOYBEAN.



Credenz® soybeans are designed using smart genetics.

This means our state-of-the-art breeding advances the highest potential germplasm at each step of the breeding process to provide tailored varieties to fit any field conditions. Plus, Credenz® offers a choice in top weed control traits to protect your yield potential. This smart attention to detail, coupled with a dedication to ongoing innovation, makes Credenz soybeans the smarter choice for your fields.

Explore the smarter soybean at Credenz.Bayer.com.



© 2016 Bayer CropScience LP, 2 TW Alexander Drive, Research Triangle Park, NC 27709. Always read and follow label instructions. Bayer, the Bayer Cross, and Credenz are registered trademarks of Bayer. For additional product information, call toll-free 1-866-99-BAYER (1-866-992-2937) or visit our website at www.CropScience.Bayer.us. CR0516CREDNZ182V00R0

COMPANIES Bi – Ce

Biospecimen Procurement Solutions Inc. (*Chapel Hill*) provides devices for the acquisition, cryopreservation and transport of human tissue specimens (biospecimens) used in biomarker analysis. BPS is the research and development subsidiary of Core Prognostex Inc.

www.coreprognostex.com

Biota Diagnostics LLC (*Charlotte*) offers pharmaceutical compound testing, dialysis and medical device testing, and environmental analytical testing services.

www.biotadiag.com

Biotech Restorations LLC (*Denver*) provides bioremediation of petroleum and chlorinated hydrocarbons, especially gasoline and diesel and organochloride pesticides, PCBs and volatile chemicals.

www.biotechrestorations.com

BioTrackers Inc. (*Charlotte*) develops bacterial, or microbial, source tracking technology.

Bio-Val LLC (*Cornelius*) provides assay development, method validation, regulatory compliance and medical writing services.

www.biovalconsulting.com

BioVendor LLC (*Asheville*) sells biological reagents and research products, including enzyme-linked immunosorbent assay (ELISA) kits, antibodies, proteins and other molecules for life sciences research.

www.biovendor.com

Bioventus LLC (*Durham*) researches and develops biomaterials, cell-based therapies and other products to treat osteoarthritis and orthopedic injuries, as well as related infections and pain.

www.bioventusglobal.com

BioZyme Inc. (*Apex*) develops and sells substrates for metalloproteinases (MMPs and ADAMs) which can be used in enzyme assays and other diagnostic tests.

www.biozyme-inc.com

Blue Ridge Institute for Medical Research (*Horse Shoe*) researches protein kinase enzymes and targeted cancer therapies.

www.brimr.org

Botanics Integrated LLC (*Durham*) researches botanical extracts and develops botanical medicines to treat cardiovascular diseases.

www.botanicsintegrated.com

Brite Bio Inc. (*Research Triangle Park*) provides contract research services, including cell culture services, cell-based assays, biomarker assay development, toxicological assays, bio-banking, drug target identification, and gene expression profiling and characterization.

www.britebio.com

Burke Research Associates LLC (*Morganton*) conducts phase three and four clinical trials for gastrointestinal disorders such as ulcerative colitis, Crohn's disease and diverticulitis.

Burleson Research Technologies Inc.

(*Morrisville*) provides laboratory services to the biotechnology, pharmaceutical, chemical manufacturing and health care industries with proof-of-concept, preclinical, clinical and toxicology studies.

www.brt-labs.com

C Change Surgical LLC (*Winston-Salem*) researches, patents and commercializes surgical technologies, with a focus on computerized, therapeutic temperature management technologies.

www.cchangesurgical.com

Calvert Laboratories Inc. (*Cary*) provides preclinical research and contract drug discovery and development services, such as lead identification and lead optimization services.

www.calvertlabs.com

Camargo Pharmaceutical Services LLC

(*Durham*) provides contract drug development services, including formulation and testing, regulatory consulting, phase one through four program development, and API and clinical trial materials sourcing.

www.camargopharma.com

Campbell University Pharmaceutical Education and Research Center (*Buies Creek*) offers analytical, formulation, R&D and training services to the pharma and biotech industries, compounding pharmacies, government agencies and other academic institutions.

www.campbell.edu/cphs/centers-and-programs/pharmaceutical-education-research-center/

Camras Vision Inc. (*Research Triangle Park*) is developing a medical device to treat glaucoma.

www.camrasvision.com

Cancer Advances Inc. (*Durham*), a subsidiary of Cato Bioventures, develops immunomodulator therapeutics to treat gastrointestinal cancers.

www.canceradvancesinc.com

Cancer Genetics Inc. (*Morrisville*) offers diagnostic products and services that enable precision medicine in the field of oncology. This site performs clinical pharmacogenomic testing and provides biorepository services under federally-designated clinical lab standards.

www.cancergenetics.com

Capture Pharmaceuticals Inc. (*Chapel Hill*) develops oral treatments for removing toxic or radioactive metals in contaminated individuals.

www.capturepharm.com

CardioPharma Inc. (*Wilmington*) develops combinatorial products to treat cardiovascular disease.

www.cardio-pharma.com

CardioVascular and ExtraCorporeal Technologies (*Winston-Salem*) provides medical device preclinical, regulatory and clinical specialist services within the fields of medical devices for cardiac surgery, implants and related clinical sciences, such as anesthesia.

cvect.devhub.com

Carolina Immunochemistry LLC (*Winston-Salem*) develops immunological reagents and homogenous assays for vitamin D and drugs of abuse that can be run with equipment already present in most physician laboratories.

Carolina Liquid Chemistries Corp. (*Winston-Salem*), an ISO-certified and FDA-registered medical device company, specializes in clinical chemistry analyzers and reagents for clinical and reference labs. CLC also offers instrument training, repair, QA and technical support.

www.carolinachemistries.com

Carolinas HealthCare System Division of Therapeutic Research and Development (*Charlotte*) conducts clinical studies, patient-focused translational research and outcomes research.

www.carolinashealthcare.org/research-and-clinical-trials

Catalent Pharma Solutions LLC (*Morrisville*) develops inhalation products and provides analytical testing, formulation and other scientific services.

www.catalent.com

Cathtek Inc. (*Winston-Salem*) develops and manufactures catheters and related accessories.

www.cathtek.com

Cato Research Ltd. (*Durham*) provides contract research services, including design and management of preclinical and clinical studies, regulatory assessments, data management and statistics, CMC program management, medical writing and submission of regulatory documents.

www.cato.com

Cedarlane Laboratories Ltd. (*Burlington*) manufactures and sells antibodies, proteins, research reagents and cell separation media to the life science community. This site is a distribution office.

www.cedarlanelabs.com

CEI Labs Inc. (*Cary*) provides industrial hygiene laboratory services such as asbestos testing, microbiology analysis and fungi analysis.

www.ceilabs.com

Cell Microsystems Inc. (*Research Triangle Park*) develops, manufactures and commercializes products and tools for use in bioscience analytical research laboratories.

www.cellmicrosystems.com

Collective BioTherapy Inc. (*Research Triangle Park*) is developing cellular and monoclonal antibody-based platforms for treating cancers, autoimmunity and immunodeficiency.

www.collectivebiotherapy.com

Cellex Inc. (*Research Triangle Park*) develops, manufactures and markets diagnostic tests suitable for point-of-care use. These tests use a platform technology called Homogeneous Biochemiluminescence Assay (HBA), which enables assays that are highly sensitive and easy-to-use.

www.cellex.us

CELLF-Bio LLC (*Winston-Salem*) is developing a novel regenerative medicine-based therapy for fecal incontinence.

CellSolutions LLC (*Greensboro*) develops liquid-based preparation and evaluation systems for cytology applications. The company's primary area of focus is women's health, including cervical cancer screening, pre-cancer detection and evaluation of infectious disease.

www.cellsols.com

Celplor LLC (*Raleigh*) provides molecular biology services, including stable cell line generation, Southern blot analysis, Western blot analysis, cDNA cloning and mouse tail genotyping.

www.celplor.com

CEM Corp. (*Matthews*) designs and develops microwave laboratory instrumentation and scientific methods for life sciences, analytical laboratories and processing plants.

www.cem.com

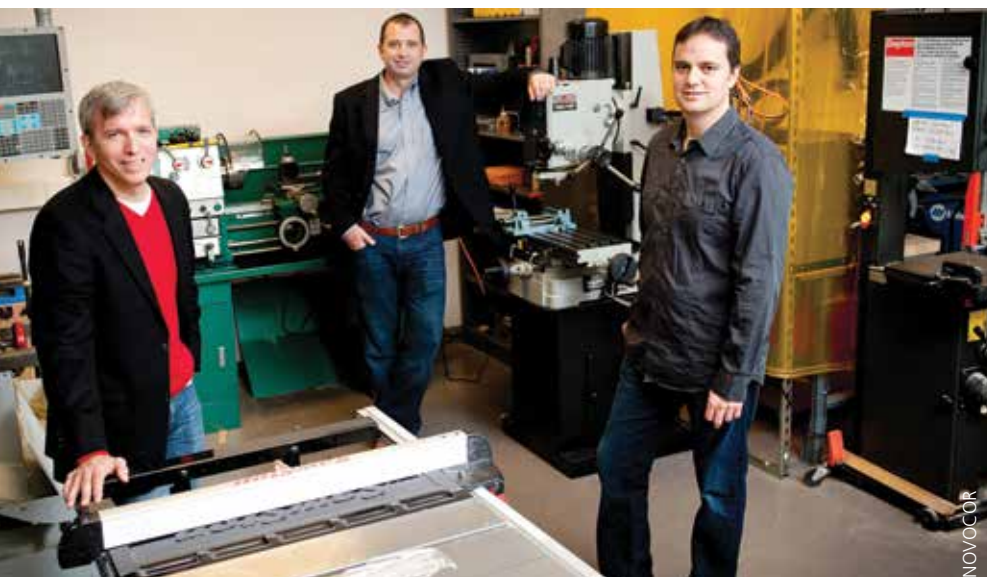


BioNetwork
NC Community Colleges
Creating Success in Life Science

Connecting industry-required skills
to educational activities through:

- Customized Hands-On Training
- Industry-Specific Workshops
- Laboratory Resources
- Student Outreach Programs
- Faculty Professional Development
- Online Interactive Training

To learn more, visit us at:
ncbionetwork.org



Cempra Pharmaceuticals Inc. (*Chapel Hill*) develops antibiotics for treating drug-resistant bacterial infections.

www.cempra.com

Cenduit LLC (*Durham*) helps pharmaceutical, biotech and medical device companies control the processes of patient enrollment, patient randomization and drug supply through the use of Interactive Response Technology (IRT).

www.cenduit.com

Centauri Surgical Systems (*Durham*) develops MRI-guided robotic surgical platforms for neurologic procedures that allow surgeons to precisely access the brain and spine, providing rapid, automated delivery of diagnostic and therapeutic instruments and drugs.

www.centaurisurgical.com

Centice Corp. (*Morrisville*) develops computational sensor technology for pharmaceutical development, drug anticounterfeiting, biotechnology, process manufacturing and homeland security applications.

www.centice.com

Centre Ingredient Technology Inc. (*Rockingham*) develops natural flavors and fragrance ingredients for the food, beverage, and cosmetics industry using fermentation. CIT also provides contract development, toll manufacturing and biotransformation services.

www.bioingredients.com

CertiRx Corp. (*Research Triangle Park*) develops products to prevent counterfeiting of pharmaceuticals and other products, including both printed authentication and microparticle taggants.

www.certirx.com

Chaperone Therapeutics Inc. (*Research Triangle Park*) develops disease-modifying therapies for neurodegenerative and rare diseases caused by protein misfolding.

www.chaperonetherapeutics.com

Charles River Laboratories Inc. (*Raleigh, Durham and Morrisville*) provides drug discovery and development process services. CRL's Oncology Center of Excellence in Morrisville provides in vivo and in vitro oncology research services. CRL's Pathology Associates in Durham provides pathology and toxicology contract services.

www.criver.com

Charter Medical Ltd. (*Winston-Salem*) designs and supplies single-use solutions for cell growth, frozen storage and biological fluid handling for the bioprocessing, cell therapy and medical device industries. CML is FDA registered and ISO 13485 certified.

www.chartermedical.com

Chematron Inc. (*Charlotte*) manufactures textile chemicals and has the capability for contractual custom manufacture of specialty chemicals.

www.chematron.com

Chem-Bac Laboratories Inc. (*Charlotte*) is an FDA-registered analytical testing laboratory specializing in petroleum products, polymers, pharmaceuticals and textiles.

www.chembac.com

Cheminova Inc. USA (*Research Triangle Park*) is the U.S. subsidiary of Cheminova A/S, a Danish company that develops and produces herbicides and other plant protection products. Cheminova's office in RTP handles sales and marketing in the U.S.

www.cheminova-us.com

ChemoGenics Biopharma LLC (*Research Triangle Park*) provides collaborative drug discovery, bioanalytical, formulation and scale-up services. Capabilities include medicinal chemistry, DMPK, bioinformatics and preclinical models in cancer, inflammation and metabolic diseases.

www.chemogenicsbiopharma.com

ChemQ Bioscience LLC (*Research Triangle Park*) develops new liquid-based cytology processing products that help prepare specimens for unobstructed clear analysis of cells by pathologists.

www.vitroprep.com

Chemring Detection Systems Inc. (*Charlotte*) develops and manufactures chemical and biological agent detection systems, as well as explosive detection systems.

www.chemringds.com

Chem-Tex Laboratories Inc. (*Concord*) develops and manufactures specialty chemicals for the textiles, paper and industrial polymer industries. Its product Bac-Shield contains a natural microbial extracted from snow crab shells.

www.chemtexlaboratories.com

Chemtura USA (*Gastonia*) manufactures specialty chemicals and crop protection products.

www.chemtura.com

Chesson Laboratory Associates Inc. (*Durham*) develops prescription and over-the-counter polymer-based medical products for wound care and skin and nail care products.

www.chessonlabs.com

Chiesi USA Inc. (*Cary*) is a specialty pharmaceutical company focused on the research, development, production and commercialization of products in the areas of cardiovascular, respiratory, neonatology, rare disease and special care therapeutics.
www.chiesiusa.com

Chiltern International Inc. (*Wilmington and Cary*) conducts phase one through four global clinical trials across a broad range of therapeutic areas, functional service provision and contract staffing solutions.
www.chiltern.com

Chimerix Inc. (*Durham*) discovers, develops and commercializes broad spectrum antivirals for the prevention and treatment of life-threatening viral infections.
www.chimerix.com

Chirazyme Labs Inc. (*Washington*) produces enzymes for stereospecific epoxidation intermediates in pharmaceutical synthesis.
www.chirazyme.com

Cirrus Pharmaceuticals Inc. (*Morrisville*) a Kemwell company, provides product and process development services, including analytical services, formulation development, stability testing, scale-up and technical transfer, as well as cGMP manufacturing services for many dosage forms.
www.cirruspharm.com

CivaTech Oncology Inc. (*Durham*) develops radioactive polymer-based devices to treat localized tumors.
www.civatechoncology.com

CiVentiChem (*Cary*) provides contract R&D services, medicinal chemistry, lead optimization, process R&D, cGMP manufacturing of APIs for clinical trials, cGMP/GLP analytical services, CMC consulting and custom synthesis of pharmaceutical intermediates and APIs.
www.civenticchem.com

Clavé Biodesign Inc. (*Cary*) develops cell-specific peptides which can be used for therapeutic purposes related to cancer, cardiovascular disease and ophthalmology as well as for diagnostic imaging and biomarkers.
www.clavebiodesign.com

Clinical Sensors Inc. (*Research Triangle Park*) is developing membrane technologies for point-of-care sensors that enable early detection and monitoring of critical diseases and conditions. Clinical Sensors is focused on both implantable devices and point-of-care diagnostics.
www.clinicalsensors.com

Clinipace Worldwide Inc. (*Morrisville*) provides full-service global clinical development services for drug and medical device programs using its TEMPO eClinical platform, as well as regulatory and strategic consulting.
www.clinipace.com

Cloud Pharmaceuticals Inc. (*Research Triangle Park*) uses high-performance computing and the principles of personalized medicine to enable clients and partners to speed drug development.
www.cloudpharmaceuticals.com

Cmed Clinical Services (*Durham*) provides clinical services to drug development organizations and manages early-phase studies (phase one through two b) with a focus in oncology, infectious disease, respiratory infection and cardiology.
www.cmedresearch.com

CMP Pharma Inc. (*Farmville*) develops and manufactures semi-solid and liquid niche drug products.
www.cmppharma.com

Cognosci Inc. (*Research Triangle Park*) develops neurorestorative therapies for Alzheimer's disease, multiple sclerosis, traumatic brain injury, nerve crush and other disease and trauma indications.
www.cognosci.com

Columbia Life Systems Inc. (*Chapel Hill*) is developing a computer-controlled oxygen blender for therapeutic research.

Combs Lab Inc. (*Chapel Hill*) develops drug therapies for diabetes, including a noninsulin oral medication for Type 1 diabetes.
www.combslab.com

Concentrx Pharmaceuticals Inc. (*Durham*) develops inhalation drug delivery products, including a dry powder unit dose inhaler.
www.concentrxpharma.com

Contego Medical LLC (*Raleigh*) develops medical devices for cardiovascular applications. The devices combine embolic filter protection with a stent or balloon.
www.contegomedical.com

ConvaTec Inc. (*Greensboro*) manufactures medical products and technologies in the areas of wound therapeutics, ostomy care, continence and critical care, and infusion devices.
www.convatec.com

Cook Medical (*Winston-Salem*) develops and manufactures devices used in gastrointestinal endoscopy to diagnose and treat esophageal, gastric, pancreatic, biliary and colonic disorders.
www.cookmedical.com

Corning Life Sciences (*Durham*) manufactures pipettes, conical and round-bottomed tubes, cell inserts, tissue-culture plates and ADME/Toxicology products.
www.corning.com

Cotton Incorporated's Agricultural & Environmental Research Division (*Cary*) improves cotton cultivation through genetic and biotechnology tools, enhancing yield, quality and resistance of cotton varieties.
www.cottoninc.com

Countervail Corp. (*Charlotte*) develops and commercializes products to protect against and treat exposure to chemical weapons and pesticide poisoning.
www.countervailcorp.com

Couragen Biopharmaceutics LLC (*Durham*) develops gene and protein therapy products for pre-clinical and clinical use for the treatment of genetic and chronic diseases. Couragen also provides custom adeno-associated virus vectors as a tool for laboratory research.

Covance Inc. (*Durham and Research Triangle Park*) is the drug development business of LabCorp. Covance provides a range of early-stage and late-stage product development services primarily to the pharmaceutical and biotechnology industries. The RTP site specializes in bioanalytical and immunoanalytical services, specializing in GLP-compliant LC/MS/MS bioanalytical services for all phases of drug discovery and development.
www.covance.com

COMPANIES Cr – En

Craft Technologies Inc. (*Wilson*) provides analytical and method development services to measure nutritional components in blood, tissues, dietary supplements, food and animal feed.

www.crafttechnologies.com

Creative PEGWorks (*Chapel Hill*) manufactures and supplies advanced functional polymer products for research. Creative PEGWorks also offers custom synthesis of polymers, APIs, amino acids and oligomers, as well as PEGylation services.

www.creativepegworks.com

Creative Scientist Inc. (*Durham*) specializes in bioassay development, primary cell production and preclinical contract research services. They are also developing a radiation sensitivity cell-based assay.

www.incellbio.com

Cromoz Inc. (*Research Triangle Park*) develops nanoparticles that can be used as a drug delivery tool for neurological diseases. The technology increases drugs' ability to cross the blood-brain barrier, which improves drug-localization and reduces dosage amounts and drug side effects.

www.cromoz.com

Crop Microclimate Management Inc. (*Apex*) researches and develops technologies to improve crop productivity by mitigating the impact of environmental stresses.

www.cropstress.com

Crown Bioscience US Research Center (*Kannapolis*) at the David H. Murdock Research Institute is a preclinical CRO with expertise in cardiovascular disease, metabolic disease and translational oncology research.

www.crownbio.com

CSS-Dynamac (*Durham*) provides health and safety services and scientific program support in the physical and life sciences. The Durham location provides environmental toxicity testing services.

www.css-dynamac.com

CTMG Inc. (*Greenville and Raleigh*) provides site-specific clinical research management services, including patient recruitment, personnel, expertise and systems.

www.ctmginc.com

Curasan Inc. (*Durham*) offers products in the fields of bone and tissue regeneration and wound healing for dental applications.

www.curasaninc.com

Curl Bio LLC (*Durham*) develops drugs for the interrelated set of disorders involving Type 2 diabetes, obesity, fatty liver disease, metabolic syndrome and associated complications.

www.curlbio.com

Cygnus Technologies Inc. (*Southport*) develops immunochemical reagents and methods for analytical research and human and animal diagnostic applications.

www.cygnustechnologies.com

Cytex Therapeutics Inc. (*Durham*) develops bio-artificial devices to treat osteoarthritis and other musculoskeletal diseases.

www.cytextherapeutics.com

Cytonet LLC (*Durham*) develops, produces and markets cell therapeutic products, including human liver cells, to treat liver diseases.

www.cytonetllc.com

Daily Manufacturing Inc. (*Rockwell*) manufactures vitamins, minerals and herbals. The company also manufactures products for other supplement companies with their own brand names.

www.daily-mfg.com

DARA BioSciences Inc. (*Raleigh*) develops and commercializes oncology treatments and supportive care.

www.darabio.com

DaVINCI Biomedical Research Products Inc. (*Garner*) is an AAALAC-accredited contract lab that performs GLP and non-GLP preclinical animal studies. DaVINCI specializes in regenerative medicine, cardiovascular, orthopedic and medical device applications.

www.davincibiomed.com

Dharma Laboratories LLC (*Morrisville*) develops dosage forms, including oral solids, liquids, injectables, topicals and specialty products.

www.dharmapdlabs.com

Diagnostic Chips LLC (*Burlington*) develops and manufactures miniaturized biomedical diagnostic devices (lab-on-a-chip).

www.diagnosticchips.com

Dignify Therapeutics LLC (*Research Triangle Park*) develops bladder and bowel drug therapies for spinal cord-injured, multiple sclerosis and similar patient populations with voiding dysfunction.

www.dignifytherapeutics.com

Dole Nutrition Research Laboratory (*Kannapolis*) conducts research on phytochemicals found in fruits and vegetables.

transforming-science.com/dole-nutrition-research-laboratory

Drumetix Laboratories LLC (*Greensboro*) provides bioanalytical support for drug metabolism, pharmacokinetics and toxicokinetic (DMPK, ADME) studies, as well as LC-MS/MS analysis of small-molecule biomarkers, such as neurotransmitters, all-trans retinoic acid and creatinine.

www.drumetix.com

DSK Biopharma Inc. (*Morrisville*) provides custom synthesis and medicinal chemistry services. DSK develops and supplies fine chemicals, APIs and intermediates, scaffolds, inhibitors, amino acids, carbohydrates, peptides, coupling reagents, and other compounds.

www.dskbiopharma.com

Dualogics LLC (*Chapel Hill*) researches and develops bispecific antibody products based on their proprietary OrthoMab platform.

www.dualogics.com

Duke Clinical Research Institute (*Durham*) is an academic clinical research organization that conducts clinical research projects from pilot study to global trials, device trials to outcomes analyses.

www.dcri.org

DuPont Pioneer - Kinston Research Center (*Kinston*) conducts research on the conventional and transgenic development of corn, soybeans and other crops, with an emphasis on drought-resistant products.

www.pioneer.com

Eboo Pharmaceuticals Inc. (*Raleigh*) develops small-molecule drugs targeted at the delta opioid receptor to treat Parkinson's disease, cardiac reperfusion injury and depression.

www.eboopharma.com

Ecoblend LLC (*Pittsboro*) develops and manufactures organic weed and pest control products, using soy methyl esters as a main ingredient.

www.ecoblend.us

Edison Agrosociences Inc. (*Research Triangle Park*) is an agricultural biotechnology company that engineers yield improvements and the plant-based production of industrial materials, with a primary focus on the development of alternative rubber crops in sunflower.

www.edisonagrosociences.com

EG-Gilero (*Asheboro*) provides contract design, development, manufacturing and commercialization for medical devices and drug delivery devices. The Asheboro site is a manufacturing facility.

www.eg-gilero.com

Ei, A Pharmaceutical SolutionWorks (*Kannapolis*) develops and manufactures liquid, semisolid and powder prescription and nonprescription skin-care and animal-health products.

www.eisolutionworks.com

Eisai Inc. (*Raleigh*) discovers, develops and markets pharmaceuticals in three main therapeutic areas: neurology, gastrointestinal disorders and oncology-critical care. This site supports global partnerships, quality assurance and supply chain for the company.

www.eisai.com

Elanco Animal Health (*Greensboro*) researches, develops and commercializes animal health products for pet owners, farmers and veterinarians.

www.elanco.us

EMSL Analytical Inc. (*Morrisville, Charlotte and Kernersville*) provides analytical services, including microbiology, asbestos, metals, indoor air quality and food testing.

www.emsl.com



EN-CAS Analytical Laboratories (*Winston-Salem*) provides GLP-compliant analytical chemistry contract services for agrochemical, veterinary and bioanalytical research. EN-CAS has experience with preclinical and clinical trials support, pesticides, herbicides and veterinary drugs.

www.en-cas.com

EncepHeal Therapeutics Inc. (*Winston-Salem*) develops medicines to improve treatment of mental health disorders through working partnerships with academic institutions, private companies and foundations and government agencies.

www.encepheal.com

ENCO Pharmaceutical Development Inc. (*Cary*) provides comprehensive product development services to the pharmaceutical and medical device market.

www.encopharma.com

Endacea Inc. (*Research Triangle Park*) develops A1 adenosine receptor antagonists as drug candidates for renal impairment and inflammation, including sepsis and asthma.

www.endacea.com

Endacea Diagnostics Inc. (*Research Triangle Park*) is developing a TR-FRET assay to measure endotoxin (lipopolysaccharide, LPS) in both non-biological and biological samples.

www.endacea.com

EnSolve Biosystems Inc. (*Raleigh*) produces proprietary biologically-based treatment systems to address oily bilge water, "frack" water, process waste streams and scrubber water. They also manufacture bioenzymatic degreasers/detergents and oil-spill cleanup products.

www.ensolve.com

Entegriion Inc. (*Research Triangle Park*) develops biologic and medical device technologies to enhance the safety and availability of the human blood supply. The company also provides blood supply-related contract R&D services to the U.S. Department of Defense.

www.entegriion.com

Entera Health Inc. (*Cary*) develops medications for gastrointestinal conditions and HIV. Entera Health has proprietary R&D, clinical and commercial staffing talent capabilities.

www.enterahealth.com

Enteric Solutions Corp. (*New Bern*) is a nonprofit organization that develops innovative pharmaceutical technologies for the treatment of enteric disease in developing countries.

www.entericsolutions.org

ENTEX Technologies Inc. (*Chapel Hill*) provides advanced biological and filtration wastewater treatment that can be customized for various industries.

www.entexinc.com

EntoGenetics Inc. (*Charlotte*) engineers the production of spider silk at a commercial scale through the genetic transformation of silkworms. Spider silk is a very strong fiber that has applications in the biomedical, defense and textile industries.

www.entogenetics.com

ENVIGEN Pharmaceuticals Inc. (*Durham*) develops classes of small drug-like molecules to treat life-threatening diseases including cancer, HIV/AIDS and neurological disorders.

www.envigenpharma.com

Environmental Testing Solutions Inc. (*Asheville*) offers microbiological and chemical testing for drinking water and wastewater, and aquatic biomonitoring toxicity testing.

www.etsnclab.com

Envisia Therapeutics Inc. (*Morrisville*) discovers and develops novel therapies to address significant unmet medical needs in ophthalmology.

www.envisiatherapeutics.com

Enzerna Biosciences LLC (*Chapel Hill*) conducts mitochondrial DNA disease research and engineers site-specific RNA endonucleases capable of modulating RNA expression without permanent alteration of the target gene.

eosMYCO Inc. (*Charlotte*) provides environmental remediation services and is specifically focused on rehabilitation of terrestrial sites of chemical and metallic contaminants using mycological biotechnology applications.

www.eosmyco.com

EpiCypher Inc. (*Research Triangle Park*) develops and manufactures novel products and tools for epigenetics and chromatin focused drug discovery and development. The company also provides services to discovery groups in industry and academia.

www.epicypher.com

EPL Inc. (*Durham*) provides GLP-compliant toxicologic pathology and related services including necropsy, histology, immunohistochemistry, pathology evaluation, EM, stereology, pathology peer reviews, specimen storage and consultation.

www.epl-inc.com

Eppin Pharma Inc. (*Chapel Hill*) is developing a non-hormonal male oral contraceptive.

www.eppinpharma.com

Eton Bioscience Inc. (*Research Triangle Park*) specializes in DNA sequencing and offers other services such as gene and peptide synthesis, mutagenesis and mammalian cell expression.

www.etonbio.com

Eurofins Agrosience Services Inc. (*Mebane*) provides contract research services, product development consulting and technical support to the crop protection, agricultural biotechnology and pest control industries.

www.eurofins.com/agrosienceservices.aspx

Exela Pharma Sciences LLC (*Lenoir*) develops and manufactures injectable, ophthalmic and inhalation pharmaceuticals. The Lenoir site is a sterile manufacturing facility, compliant with cGMP and other FDA regulations.

www.exelapharma.com

Exodos Life Science Partners (*Chapel Hill*) advances product concepts through the 505(b)(2) process to early clinical proof-of-principle and sale. Exodus specializes in topical formulations for the treatment of pain and inflammation.

www.exodosls.com

Expression Analysis (EA), a Q2 Solutions company, (*Morrisville*) provides gene expression and genotyping assays, DNA sequencing services, sequence enrichment technologies, marker-assisted breeding and bioinformatics support. The lab is CLIA-registered.

www.q2labsolutions.com/genomics-laboratories

f(x) Immune Diagnostics Inc. (*Candler*) provides advanced testing services to developers of immuno-therapeutics and vaccines using its proprietary technologies. The company's pipeline includes related clinical diagnostics, POC and companion assays and systems.

www.fx-immune.com

Fair Products Inc. (*Cary*) manufactures and distributes tobacco crop care products including insecticides, sucker control, ripeners and fertilizers.

www.fairproductsinc.com

Falcon Therapeutics Inc. (*Chapel Hill*) is developing personalized neural stem cell therapies to treat glioblastoma.

Fennec Pharmaceuticals Inc. (*Research Triangle Park*) develops cancer therapeutics. Its lead product under development is Eniluracil, an oral dihydropyrimidine dehydrogenase inhibitor to improve the tolerability and effectiveness of oncology drugs.

www.fennecpharma.com

Fervent Pharmaceuticals LLC (*Greenville*) develops a nonhormonal product, FP-101, to treat vasomotor symptoms associated with menopause.

www.ferventpharma.com

FHI 360 (*Durham*) develops responses to HIV/AIDS and other health and nutrition concerns in resource-poor settings. The laboratory in Durham offers medical device and pharmaceutical testing services.

www.fhi360.org

First Flight Biosciences Inc. (*Research Triangle Park*) provides contract drug discovery research services, including lead optimization in preclinical drug discovery, assay development, compound profiling, high-throughput screening, in vivo pharmacology, DMPK and bioanalytics.

www.firstflightbioscience.com

FLAG Therapeutics Inc. (*Raleigh*) develops cancer therapeutics using new classes of small molecules which have selective dual activity: antiangiogenesis and chemotherapeutic.

www.flagtherapeutics.com

Fleming Laboratories Inc. (*Charlotte*) manufactures animal pharmaceuticals.

Flexcell International Corp. (*Burlington*) designs and manufactures products for cytomechanics research, studying cellular responses to mechanical forces such as tension or compression.

www.flexcellint.com

FMC Agricultural Solutions (*Research Triangle Park*) a unit of FMC Corp., develops biological crop protection products. The RTP location conducts research on plant-microbe interactions.

www.fmccrop.com

Foothills Bio-Energies (*Lenoir*) produces biodiesel from virgin agri-based feedstock.

www.foothillsbio-energies.com

Fresenius Kabi USA LLC (*Wilson*) manufactures medical devices and sterile injection- and infusion-based drug-delivery products.

www.fresenius-kabi.com

FSC Pediatrics Inc. (*Charlotte*) acquires and markets pharmaceutical products and medical devices, with a focus on unmet pediatric patient and practitioner needs.

www.fscpediatrics.com

FUJIFILM Diosynth Biotechnologies USA Inc. (*Morrisville*) provides biologics contract development and manufacturing. Services include cell line development, process development, analytical development and clinical and commercial manufacturing.

www.fujifilmdiosynth.com

G&W Laboratories LLC (*Lincolnton*) manufactures OTC and prescription hydrocortisone, antifungal and permethrin products as creams, ointments, liquids and suppositories.

www.gwllabs.com

G1 Therapeutics Inc. (*Research Triangle Park*) develops small-molecule therapies to address significant unmet needs in oncology, with a focus in chemoprotection and antineoplastics.

www.g1therapeutics.com

Gaia Herbs Inc. (*Brevard*) grows and produces certified organic herbal products. All growing, manufacturing, processing, researching, packaging and distribution takes place in its North Carolina facilities.

www.gaiaherbs.com

Galaxy Diagnostics Inc. (*Morrisville*) provides molecular diagnostic testing for emerging infectious diseases for both veterinary and human medicine. Test methods are based on technologies developed by scientists at NC State University.

www.galaxydx.com

GEM Tox Consultants & Labs Inc. (*Greenville*) conducts research focused on cancer biotechnology, food safety and toxicology, with a special emphasis on cancer biomarker discovery and validation.

www.gemtoxllabs.com

Gene Facelift LLC (*Winston-Salem*) develops a cosmetic gene therapy in a topical cream formulation to reduce wrinkles, regenerate collagen and restore aging skin. The platform delivery platform will be used to develop wound healing drugs.

www.genefacelift.com

Besides the 63,000 life science workers across N.C., the total jumps to 228,000 when you count the jobs indirectly attributable to the sector. That's about one of every 20 workers.

COLLABORATIVE INNOVATION

Wake Forest Innovations improves health through collaborative innovation between industry and the faculty and staff of Wake Forest Baptist Medical Center. We accomplish this through our three centers:

- **Center for Technology Innovation & Commercialization**, which accelerates the development and commercialization of inventions.
- **Center for Industry Research Collaboration**, which expedites access to specialized clinical and research capabilities.
- **Center for Applied Learning**, which promotes best clinical practices through experiential training.



+1.336.713.1111 \ WakeForestInnovations.com

 **Wake Forest®**
Innovations

Gene Master LLC (*Cary*) provides contract biomedical research services such as genotyping and vector construction. Gene Master helps design and perform biological experiments.

www.ncgenemaster.com

GeneCentric Diagnostics Inc. (*Durham*) develops molecular diagnostic assays to enable oncologists and their patients to make informed, individualized treatment decisions.

www.genecentric.com

Geneffects LLC (*Mebane*) provides proteogenomic analyses of data and has developed a proteogenomic search software called Peppy.

www.geneffects.com

Geneformation Technology Inc. (*Belmont*) is a cytogenetics company that develops and commercializes cell culture technology for peripheral blood, bone marrow and amniotic fluid.

www.geneformation.com

Genemart Bioscience Inc. (*Cary*) manufactures antibodies, recombinant proteins, ELISA kits and critical assays. Genemart also provides contract R&D, process development and manufacturing services to the biopharmaceutical and academic lab community.

General Biosystems Inc. (*Morrisville*) provides oligo synthesis, gene synthesis biosystem optimization, protein expression and molecular biology services.

www.generalbiosystems.com

General Mills Agricultural Research (*Kannapolis*) is developing an oat with higher and more consistent levels of beta-glucan in order to reduce cholesterol.

transforming-science.com/general-mills

Genetron Health Technologies Inc. (*Research Triangle Park*) develops and provides cancer precision diagnostics.

www.genetronhealth.com

GENEWIZ Inc. (*Research Triangle Park*) provides custom DNA sequencing, gene synthesis, genomics, next-generation sequencing and molecular biology in a GLP/cGMP regulatory environment.

www.genewiz.com

Genova Diagnostics Inc. (*Asheville*) performs diagnostics and molecular genetics testing under federally-designated clinical lab standards to support physicians in personalized chronic disease treatment and prevention.

www.gdx.net

GFS Agri Corp. (*High Point*) manufactures Poultry Protect, a natural microbial and enzyme treatment for ammonia odor produce by poultry litter.

www.globalfuturesolutions.com

GFS Health Corp. (*High Point*) researches and develops environmentally-friendly enzyme, antimicrobial and microbial products for the Americas. Their areas of expertise include oil and gas, mining, bioremediation, aquaculture and agriculture.

www.globalfuturesolutions.com

Glenmark Pharmaceuticals Inc., USA (*Monroe*) manufactures and markets generics in the areas of dermatology, hormones, controlled substances and modified release products. The Monroe site is a manufacturing facility that produces oral solids, injectables and topicals.

www.glenmarkpharma.com

Global Lyme Diagnostics LLC (*Research Triangle Park*) develops solutions to accurately diagnose Lyme disease in humans and domestic animals.

Global Oasis Technologies Inc. (*Durham*) develops diagnostics for water quality assessment.

www.globaloasistechnologies.com

Global Vaccines Inc. (*Durham*) is a not-for-profit company that develops vaccines against developing-country diseases such as HIV/AIDS, polio, dengue fever, malaria and viral diarrhea (rotavirus).

www.globalvaccines.org

Glycan Therapeutics Inc. (*Chapel Hill*) is developing therapies for thrombosis and tools to aid research in the study of sugar chains or glycobiology.

Glycotech Inc. (*Leland*) is a contract manufacturer using renewable biofarnesene from a partnership with Amyris to manufacture products such as biofuels, lubricants, cosmetics and other specialty chemicals. They have developed a process to convert cornmeal to ethanol.

Goldsboro Laboratories LLC (*Goldsboro*) develops and manufactures vaccines for the swine, poultry and cattle divisions of Goldsboro Milling Company.

Gravity Bio Inc. (*Chapel Hill*) develops and commercializes pharmaceutical drugs and medicinal preparations that treat cough, cold, allergies, flu and other viruses, and nasal, bronchial, respiratory and associated congestion.

www.gravitybio.com

Greer Laboratories Inc. (*Lenoir*) develops and distributes animal and human allergy immunotherapy products and services.

www.greerlabs.com

Grifols Inc. (*Clayton, Research Triangle Park and Raleigh*) develops and produces plasma-derived products, including plasma therapies, hospital pharmacy products and diagnostic technology, to treat chronic and acute conditions in the therapeutic areas of immunology, pulmonology and hemostasis. Grifols' Clayton plant is the company's primary manufacturing facility, producing proteins to treat rare diseases including immune deficiencies and genetic emphysema.

www.grifols.com

GSK (*Research Triangle Park and Zebulon*) develops and manufactures vaccines and medicines for the treatment of infectious and respiratory diseases, central nervous system disorders, immuno-inflammation, diabetes and cancer. The RTP site is one of two U.S. corporate headquarters. GSK manufactures solid-dose products, including tablets and capsules at its Zebulon facility. The plant also does granulation, drying and packaging, and contract manufacturing of antibiotics for other companies.

www.gsk.com

GTCallison LLC (*Mocksville*) researches and develops diagnostic tests for animal pathogens.

www.gtcallison.com

North Carolina is the birthplace of the global contract research and testing industry, and is now home to more than 130 such companies – the world's largest concentration.

Johnston County's Unique Assets Fuel Continued Job Growth

By Lawrence Bivins

It would be an understatement to suggest that 2015 was a good year for economic development in Johnston County. But the news last August that Novo Nordisk would be doubling the jobs at its Clayton bio-manufacturing campus and investing \$1.8 billion was one of numerous stories that highlight the county's remarkable appeal for businesses and jobs.

BD's distribution operation in Four Oaks is running at capacity, directing the company's medical supplies to patients and providers around the world. Johnston County's convenient location, abundant land and close proximity to interstates and ports attract operations like those at BD and food supplier Sysco Corporation, which maintains a major distribution site in Selma.

Recent news that Grifols plans to invest an additional \$210 million for its plasma fractionation and purification plants in Clayton comes on top of the \$370 million facility the Spain-based company opened here last year. The company will add to its bio-manufacturing workforce, which currently numbers 1,850.

North Carolina leads the nation in terms of bio-manufacturing jobs, and Johnston County is a big reason why. The community's integration with the Research Triangle is yielding benefits for Johnston County and the broader region. Novo Nordisk's announcement last summer brought the attention of global business media to Johnston County. It was one of the highest-dollar investments ever announced in North Carolina – potentially anywhere.

The power of leadership

There is no doubt that the great things happening at Novo Nordisk and Grifols can be traced to the bold, farsighted leadership displayed here 15 years ago in the creation of the Johnston County Workforce Development Center. The unique partnership between local government, the business community, educators and economic development leaders has yielded immeasurable benefits to the county. And it has served as an example other communities have replicated. In keeping with their pro-business attitude, they've begun studying how to create a regional wastewater facility that can support and add to their growing life-science sector.

Shifting economic winds can make predicting the future difficult. But Johnston County's great location, unbeatable workforce, unique infrastructure and visionary leadership have set the stage for continued job creation, business growth and economic success well into the next generation.

For additional information about the county's economic development programs, visit www.jnced.com



Grifols Therapeutics Inc. announced a \$210 million expansion on its 240-acre campus near Clayton, North Carolina



In August of 2015, Danish owned - Novo Nordisk announced \$1.8 Billion in new investment in Johnston County

In the South, we were always taught not to
"toot" our own horn...

But a few notes of praise never hurt anyone.

Only minutes from Raleigh NC and located at the crossroads of I-95/I-40 and the CSX/Norfolk rail, Johnston County is in an enviable position for recruiting new, high-tech companies with close proximity to the RTP, RDU and three renowned research universities.

2014 - 2015 Announced Investments



\$1.8 Billion

GRIFOLS \$375 Million

AVINTIV \$48 Million



919-205-1232

www.JNCED.com



[Raleigh-based writer Lawrence Bivins is author of North Carolina: The State of Minds.]



GW Pharmaceuticals (*Research Triangle Park*) develops cannabinoid prescription medicines as well as other plant-based pharmaceuticals. GW's products include Sativex for the treatment of MS spasticity and cancer pain, and Epidiolex for the treatment of childhood epilepsy.

www.gwpharm.com

Gyrus Pharmaceuticals Inc. (*Chapel Hill*) develops therapies and diagnostics for Alzheimer's disease and other amyloidoses.

www.gyruspharma.com

Happy Jack Inc. (*Snow Hill*) manufactures insecticides and pharmaceutical preparations to treat dogs.

www.happyjackinc.com

HCEC LLC (*Winston-Salem*) isolates cells from donor corneas to grow replacement corneal tissue on a scaffold as a bioengineered equivalent to the current standard of care.

www.hceccllc.com

HDH Pharma Inc. (*Morrisville*) provides contract chemistry research services to pharmaceutical and biotechnology companies. Services include medicinal and process chemistry, organic synthesis, and the provision of API intermediates, inhibitors and screening compounds.

www.hdhpharma.com

Health Decisions Inc. (*Durham*) is a global clinical research organization that specializes in applying adaptive principles to both trial design and operations.

www.healthdec.com

Healthspan Diagnostics LLC (*Chapel Hill*) develops molecular diagnostics to help physicians predict risk of adverse reactions in response to chemotherapy and surgeries.

www.healthspandiagnostics.com

Heat Biologics Inc. (*Durham*) develops therapeutic vaccines to combat a range of cancers and infectious diseases.

www.heatbio.com

Hemo Bioscience Inc. (*Morrisville*) is an FDA-registered manufacturer of blood-typing reagents and diagnostics for the blood-banking industry.

www.hemobioscience.com

Hemodynamic Therapeutics (*Durham*) develops a small-molecule combination therapy for obesity-related hypertension.

www.hemodynamictx.com

Hemoglobin Diagnostics LLC (*Research Triangle Park*) develops diagnostic tests for clinically relevant hemoglobin variants for use in screening, confirmations and point-of-care facilities.

HepatoSys Inc. (*Cornelius*) develops technologies for functional restoration of donor livers for use in transplantation and research, focusing on methods for expanding availability of quality human hepatocytes for research and toxicity testing.

www.hepatosys.com

High Point Clinical Trials Center (*High Point*) conducts phase one and two clinical research studies for pharmaceutical companies.

www.hpctrialscenter.com

HOMS LLC (*Pittsboro*) develops, manufactures and markets natural products such as the Bite Blocker line of insect repellents and Bio Block organic insecticides.

www.homs.com

Hongene Biotechnology USA Inc. (*Morrisville*) develops and manufactures bio-reagents such as nucleosides, nucleotides and phosphoramidite products.

www.hongeneusa.com

Hospira, A Pfizer Company (*Rocky Mount*) manufactures injectable hospital products. The facility also provides contract manufacturing services such as aseptic filling, lyophilization and terminal sterilization.

www.hospira.com

Howard Associates LLC (*Research Triangle Park*) provides preclinical contract research services to the pharmaceutical industry. The company uses rodent models to predict the efficacy of experimental compounds, especially for CNS diseases, and to predict CNS side effects.

www.howardassociates.net

HRF Inc. (*Raleigh*) is a plasma center that provides human blood plasmas for bioscience research.

www.hrfinc.com

Humacyte Inc. (*Morrisville*) develops processes to engineer human tissue scaffolds that can be shaped into tubes, sheets or particulates for regenerative medicine uses. The current product focus includes vascular disease, therapeutic filling and soft-tissue repair.

www.humacyte.com

Hydro Service and Supplies Inc. (*Durham*) provides design, manufacturing and installation of high-purity water systems for laboratory and manufacturing processes. It also provides microbiological and enzymatic water testing services.

www.hydroservice.com

Hyperbranch Medical Technology Inc.

(*Durham*) is a biosurgical device company focused on the design, development and manufacture of resorbable surgical sealants for general and specialty surgery use.

www.hyperbranch.com

Icagen Inc. (*Durham*) discovers, develops and commercializes small-molecule drugs that target ion channels, with a focus on epilepsy, pain and inflammatory disorders.

www.icagen.com

ICON Clinical Research LLC (*Durham*) provides drug development and clinical services, from compound selection to phase one through four clinical studies, in areas including oncology, cardiovascular and biosimilars.

www.iconplc.com

IDEXX Reference Laboratories Inc.

(*Greensboro*) provides animal health diagnostic products and services for use in small animals, equine, poultry and dairy livestock. It also provides microbiology-based water testing products.

www.idexx.com

ILS Genomics LLC (*Research Triangle Park*)

provides genotyping, gene expression analysis and biologics product safety testing services.

www.ilsgenomics.com

ImmunogeniX Research LLC (*Asheville*)

provides a cryonics biorepository for storage of patient tumor cell samples, with the goal of using those cells in tumor vaccine immunology.

www.immunogenixresearch.com

ImmunoReagents Inc. (*Raleigh*) manufactures primary and secondary polyclonal antibodies used in research and in vitro diagnostics for the pharmaceutical and veterinary markets.

www.immunoreagents.com

Inanovate Inc. (*Research Triangle Park*) develops nanostructured biochip substrates for high-throughput protein screening and analysis. The company also provides a variety of microarray services such as protein printing/arraying and assay development.

www.inanovate.com

INC Research Inc. (*Raleigh and Wilmington*)

provides phase one through four contract research services across a variety of therapeutic areas, with the capability to work with special populations, such as women and children.

www.incresearch.com

Indexus Biomedical LLC (*Durham*) designs, develops and manufactures instrument systems, reagents and assays for in vitro diagnostics, initially focusing on the hematology and immunology markets.

Indicus Pharma LLC (*Raleigh*) develops generic formulations in oral solid dosage forms, parenterals and ophthalmics. Products are manufactured at a partner facility in India.

www.indicuspharma.com

IngatayGen LLC (*Elizabeth City*) develops and produces hypoallergenic peanuts and fortified and enriched peanuts and yams through genomic and proteomic technologies.

www.ingataygen.com

Ingredion Inc. (*Winston-Salem*) manufactures ingredients for foods, beverages and drugs from corn, tapioca, wheat and potatoes.

www.ingredion.com

Inivata Inc. (*Research Triangle Park*) develops a non-invasive liquid biopsy diagnostic using the precision of circulating tumor DNA (ctDNA) analysis for improving cancer detection and assessing individual response to treatment.

www.inivata.com

InnaVasc Medical Inc. (*Research Triangle Park*) designs and develops products for vascular access. The company's first technology is an arteriovenous graft (AVG) modification that facilitates graft access and safety in hemodialysis.

www.innavasc.com

Innocrin Pharmaceuticals Inc. (*Durham*)

discovers and develops a novel small-molecule CYP17 lyase inhibitor that can be taken orally to treat castration-resistant prostate cancer.

www.innocrinpharma.com

Innovate Biopharmaceuticals Inc. (*Raleigh*)

is developing novel medicines for gastroenterological and orphan disorders.

www.innovatebiopharma.com

Innovative Neurophysiology Inc. (*Durham*)

designs and develops advanced tools, equipment and methodology for neuroscience research.

www.inphysiology.com

Intarcia Therapeutics Inc. (*Research Triangle Park*) is developing a subcutaneous delivery system for the treatment of Type 2 diabetes. The RTP location discovers and develops peptide therapeutic drugs to augment Intarcia's drug delivery platform.

www.intarcia.com

Integrated Laboratory Systems Inc.

(*Morrisville*) provides GLP toxicology, histopathology, molecular biology, and research and development services to government and commercial clients in agro-chemical, biopharmaceutical and environmental industries.

www.ils-inc.com

Intelligent Implant Systems LLC (*Charlotte*)

designs and develops medical devices for the spine.

www.intelligentimplantsystems.com

InTox Biotech (*Middlesex*) provides research and consulting in the areas of pesticide toxicology, immuno- and nucleic acid-based diagnostics, molecular biology, genomics, human and animal environmental risk assessment, forensic toxicology and arthropod control.

inVentiv Health Clinical (*Cary*) provides global drug development services to pharmaceutical, biotechnology, generic drug and medical device companies.

www.inventivhealthclinical.com

Invitrox Inc. (*Research Triangle Park*) develops specialty disease diagnostics and therapeutic monitoring assays using the characteristics of microparticles to detect early signs of cellular damage.

www.invitrox.com

Isagro USA Inc. (*Morrisville*) sells and markets crop protection products.

www.isagro-usa.com

JABB of the Carolinas Inc. (*Pine Level*) develops and manufactures fungal pesticides and biopesticide products. Products are distributed through its partner company, Terregena.

www.terregena.com

JC Med LLC (*Kannapolis*) develops home care devices for detection of insulin resistance and products that prevent insulin resistance.

www.jcmed-usa.com

Life science employment in N.C. grew 30.9 percent between 2000 and 2012. Nationwide, the sector only grew 7.4 percent during that time.



Jenken Biosciences LLC (*Research Triangle Park*) researches and develops small-molecule TLR-4 antagonists for potential treatment of inflammation associated with chronic liver disease, inflammatory bowel disease and organ damage such as lung edema and lung fibrosis.

www.jenkenbio.com

JLA International Inc. (*Edenton*) provides testing and analytical services for the food and beverage industry. It also provides technical consulting services.

www.jlaglobal.com

Kaio Therapy LLC (*Raleigh*) develops immunotherapy technology to treat solid tumors.

www.kaiotherapy.com

KaryoLogic Inc. (*Durham*) provides chromosome analysis services to research laboratories. Services include karyotyping of human, rat and mouse cell lines.

www.karyologic.com

Katharos Inc. (*Apex*) is developing a phosphate-selective adsorption blood filtering medical device to treat high blood phosphate levels in end-stage renal disease hemodialysis patients.

www.gust.com/companies/katharos_inc

KBI Biopharma Inc. (*Durham*) provides contract development and biopharmaceutical manufacturing services, such as formulation, analytical method development, stability services, process development and recombinant protein API manufacturing.

www.kbibipharma.com

Kepley Biosystems Inc. (*Browns Summit*) employs nanotechnology to develop applications that have commercial potential in the life science sector. They are currently developing a synthetic crustacean bait.

www.kepleybiosystems.com

KeraNetics LLC (*Winston-Salem*) develops and commercializes keratin-based biomaterials for therapeutic and regenerative medical applications.

www.keranetics.com

KindHeart Inc. (*Chapel Hill*) develops, sells and rents heart and lung surgery simulators using animated pig organs that have multiple realistic heartbeat functions. Simulators are used for education in surgical procedures, medical devices and robotic surgery.

www.kindheart.com

King Bio Inc. (*Asheville*) develops and manufactures water-based homeopathic medicines and supplements for human and companion-animal health. King Bio also provides contract manufacturing services.

www.kingbio.com

KinoDyn Inc. (*Durham*) develops oncology drugs that block mechanisms of cancer resistance.

Kowa Research Institute Inc. (*Morrisville*) develops therapeutic drugs for the treatment of cardio-metabolic diseases such as diabetes and atherosclerosis, pain and sensory organ disorders.

www.kowaus.com

Krenitsky Pharmaceuticals Inc. (*Chapel Hill*) discovers and develops drug candidates, with a focus on disorders of the nervous system.

www.kpi-pharma.com

kSep Systems LLC (*Morrisville*) develops bioprocessing solutions and technology for companies working with recombinant therapeutics, cell therapy and vaccine manufacturing.

www.ksepsystems.com

KXTbio Inc. (*Cary*) develops and commercializes reagents and assays for two major classes of drug targets, GTPases and G protein-coupled receptors.

www.kxtbio.com

Laboratory Corporation of America (*Burlington, Research Triangle Park, Morrisville, Kannapolis and Raleigh*) provides clinical and anatomical laboratory services, including clinical trials testing services, and offers a broad range of genomic and esoteric tests. LabCorp'Center for Molecular Biology and Pathology in Research Triangle Park provides laboratory testing services focused in diagnostic genetics, oncology and pathology. LabCorp's Center for Occupational Testing in Morrisville provides urine, hair, oral fluid and point-of-collection drugs-of-abuse testing services. LabCorp Kannapolis is a state-of-the-art biorepository that has the capacity to house 15 million samples. LabCorp Raleigh develops specialized cardiovascular diagnostic laboratory tests based on nuclear magnetic resonance (NMR) technology.

www.labcorp.com

Laudiss Labs LLC (*Winston-Salem*) uses a nanotechnology platform to encapsulate natural organic bioactive molecules to develop over-the-counter products for the cosmeceutical, pharmaceutical and veterinary industries.

www.laudiss.com

LCMS Limited (*Durham*) provides LC/MS/MS services for the identification and quantification of compounds such as proteins, biomarkers, peptides and mAb's. LCMS specializes in identifying cross contamination from manufacturing processes, and provides custom training.

www.lcmslimited.com

Leaf Technologies (*Durham*) provides yeast strains and fermentation solutions for fuel ethanol and bio-based chemical producers. Leaf Technologies is a business unit of Lesaffre.

www.leaftechnologies.com

LifeScape Biosciences Inc. (*Charlotte*) develops prescription and nonprescription (OTC) pharmaceutical products and medical foods made from FDA-designated "generally regarded as safe" (GRAS) substances.

www.lifescapebio.com

Linguaflex Inc. (*Chapel Hill*) develops medical device technology to treat obstructive sleep apnea.

www.linguaflex.com

Liquidia Technologies Inc. (*Morrisville*) utilizes PRINT technology, a unique particle engineering and manufacturing technology, to develop products in several high-growth areas such as vaccines, pulmonary, ophthalmology, oral health, and pain.

www.liquidia.com

Locus Biosciences Inc. (*Raleigh*) develops novel sequence-specific antimicrobials for human infectious diseases.

www.locus-bio.com

LotusBioEFx LLC (*Chapel Hill*) develops venous catheters impregnated with nanoscale clusters of metal alloys to inhibit formation of bacterial biofilms.

Lucerno Dynamics LLC (*Morrisville*) is developing a noninvasive device that can act as a quality control for PET/CT imaging and in the future may provide oncologists an analysis of tumor's response to ongoing treatment early in a patient's treatment course.

www.lucernodynamics.com

Lundbeck NA Ltd. (*Charlotte*) is a pharmaceutical development company that acquires and develops products for the treatment of various human diseases, including central nervous system disorders.

www.lundbeck.com/us

MAA Laboratories Inc. (*Raleigh*) is reformulating and commercializing existing proprietary anti-cancer small molecules, with the purpose of enhancing therapeutic efficiency for targeted drug delivery and mitigating undesirable effects of currently approved drugs.

www.maalaboratories.com

Magstim Inc. (*Morrisville*) develops transcranial magnetic stimulators as a treatment for nerve and brain disorders.

www.magstim.com

Mallinckrodt Pharmaceuticals (*Raleigh*) manufactures acetaminophen, the active ingredient in Tylenol, at its pharmaceutical facility in Raleigh. Mallinckrodt also manufactures contrast media used in diagnostic imaging tests.

www.mallinckrodt.com

MARBIONC Development Group LLC (*Wilmington*) is a not-for-profit organization that develops and markets new products and technologies derived from marine and aquatic organisms.

www.marbionc.org

Marble Labs LLC (*Winston-Salem*) provides contract testing, process development, laboratory services, and FDA and international regulatory expertise to biotechnology companies.

Maverick Synfuels (*Research Triangle Park*) converts biomass, municipal waste and natural gas into petroleum-free fuels and chemicals.

www.maverickbiofuels.com

MD Scientific LLC (*Charlotte*) developed the EndoTool Glucose Management System and is currently developing a drug to prevent kidney and heart injury from iodinated contrast agents.

www.mdscientific.com

MDx Health Inc. (*Hillsborough*) develops gene-methylation diagnostic tests for early cancer detection and personalized treatment decisions.

www.mdxhealth.com

Med-El Corporation USA (*Durham*) researches and develops cochlear implant technology. The Durham location manufactures cochlear implants and is also the North American headquarters.

www.medel.com/us

Medicago USA Inc. (*Durham*) develops vaccines based on proprietary manufacturing technologies and virus-like particles. The vaccines are manufactured using a transient protein expression system in *Nicotiana benthamiana*, a close relative of tobacco.

www.medicago.com

Medical Murray (*Charlotte*) is a contract developer and manufacturer of medical devices with a focus on minimally-invasive systems, permanent implants, injection molding and specialty materials (e.g. bioabsorbables and nitinol).

www.medicalmurray.com

MedKoo Biosciences Inc. (*Chapel Hill*) manufactures, sells and distributes small-molecule anticancer chemical reagents and kinase inhibitors for oncology research and provides drug discovery contract research services.

www.medkoo.com

MEDTOX Diagnostics Inc. (*Burlington*) manufactures and distributes instant drugs of abuse testing devices for use by the government, hospital/medical center and workplace markets.

www.medtoxdiagnostics.com

Medtronic Inc. (*Morrisville*) develops medical devices and technology to treat vascular diseases.

www.medtronicendoventous.com

Every dollar NCBiotech loans to a young life science company is met by an average \$112 in additional funding: government contracts and grants, equity investments, public stock sales.

Medyn Bioscience LLC (*Durham*) provides customized reagents for diagnostic testing and recombinant virus antigens for in-vitro diagnosis. MedynBio also conducts research of blood diseases and disorders.

www.medynbio.com

Merck & Co. Inc. (*Durham and Wilson*) manufactures elements of Varivax, a chicken pox vaccine, and other vaccine products in Durham. Merck's Wilson facility produces patented prescription products and performs granulation and tableting operations.

www.merck.com

Mercury Science Inc. (*Research Triangle Park*) develops novel and customized methods for the analysis of toxins, with expertise in environmental analysis of soil, water and food.

www.mercuryscience.com

Meridian Laboratory Corp. (*Charlotte*) provides CLIA-certified and COLA-accredited patient testing services, as well as testing of water quality for use in dialysis.

www.meridianlaboratory.com

Meryx Inc. (*Chapel Hill*) is developing small-molecule, orally bioavailable RTK inhibitors that inhibit growth and initiate anti-tumor immunity in hematologic and solid malignancies.

www.meryxpharma.com

Merz North America Inc. (*Raleigh*) develops and commercializes innovative treatment solutions in aesthetics, dermatology and neurosciences.

www.merzusa.com

Metabolon Inc. (*Durham*) uses proprietary metabolomics-based platforms to offer medical and agricultural biomarker discovery services. Metabolon also develops diagnostic tests and offers molecular phenotyping to support precision medicine.

www.metabolon.com

Metrics Contract Services (*Greenville*) provides analytical and formulation development services for oral solid dose pharmaceutical products. Services include potent products, controlled substances, modified release, first-in-human, CTM and commercial manufacturing.

www.metricsinc.com

Micell Technologies Inc. (*Durham*) develops combination-product therapies for interventional cardiology. Micell markets MiStent, a drug-eluting stent, in Europe and certain other regions.

www.micell.com

Microbac Laboratories Inc. (*Wilson and Fayetteville*) offers chemical and microbiological testing services for the agrochemical, pharmaceutical, tobacco and consumer products industries at its GMP-compliant, ISO 17025 accredited (A2LA) laboratory in Wilson. Microbac offers microbiological testing and sampling services for wastewater, environmental and food safety purposes at its laboratory in Fayetteville.

www.microbac.com

Microban International Ltd. (*Huntersville*) develops and manufactures antimicrobial technologies used in consumer, industrial and medical products.

www.microban.com

Mimetics LLC (*Durham*) provides a suite of bio-computation algorithms for analyzing cellular-level networks from gene expression data.

www.mimeticsbiosci.com

Minu LLC (*Pittsboro*) researches and develops ophthalmology products.

Mirimichi Green Express LLC (*Castle Hayne*) develops non-toxic landscape products, including turf and tree care products, seed and soil enhancers and protectants, and weed and grass control herbicides.

www.mgpros.com

Mispro Biotech Services Corp. (*Research Triangle Park*) provides contract research, vivarium space, remote animal husbandry services and remote facility management.

www.misprobiotech.com

Mlinzi Vaccines LLC (*Raleigh*) develops technology to enable production of live vaccines against disease-causing bacteria, such as Salmonella, E. coli and other species of the enteric bacteria family.

www.mlinzi.com

Mokobio Biotechnology Group (*Research Triangle Park*) develops rapid nucleic acid detection technologies for infectious disease pathogens. The RTP location is the company's R&D headquarters.

www.rtp.org/location/the-lab/mokobio-biotechnology-group

Molecular Orthopaedics Inc. (*Chapel Hill*) develops gene therapies for osteoarthritis, with applications in human and animal health.

Molecular Toxicology Inc. (*Boone*) manufactures reagents, assay kits and other products for genetic toxicology research and testing, as well as products for industrial microbiology and quality control.

www.moltox.com

Molecules in Action LLC (*Chapel Hill*) provides custom molecular modeling, virtual drug screening, molecular simulations and consulting services.

www.moleculesinaction.com

Momentum Research Inc. (*Durham*) manages and directs phase one through four clinical research projects and specializes in cardiovascular clinical trials management.

www.momentum-research.com

MonomerChem Inc. (*Durham*) provides contract drug development services, including custom synthesis, medicinal chemistry, lead optimization and synthesis of reference standards and metabolites.

www.customsynthesis.com

Monsanto Co. (*Mount Olive*) is a crops research station.

www.monsanto.com

Mucommune LLC (*Chapel Hill*) researches improved protection against infectious diseases transmitted at mucosal surfaces. Mucommune's current focus is a method to prevent sexually transmitted infections using monoclonal antibodies encapsulated in a polymeric capsule.

MultiGEN Diagnostics LLC (*Greensboro*) develops molecular diagnostic products and DNA sequencing-based platform technologies for infectious disease, pharmacogenomics and oncology.

www.multigen-diagnostics.com

Musclegen Research Inc. (*Willow Spring*) develops, manufactures and sells nutraceutical protein powders and performance enhancers. Musclegen alters the protein to reduce the dosage amount, improve the product's shelf life and improve the product's rate of absorption.

www.musclegen.net

MxBiomed LLC (*Greenville*) is commercializing a patented injectable nanoscaffold to treat diabetic foot ulcers.

www.mxbiomed.com

Mycorrhiza Biotech LLC (*Burlington*) develops products and services to improve plant production. They specialize in fungi and allied organisms for diverse applications in agri-business.

www.mycorrhizabiotech.com

Mycosynthetix Inc. (*Hillsborough*) manages a large collection of fungal isolates and discovers novel fungal metabolites for human and animal health, and compounds for agricultural applications.

www.mycosynthetix.com

NanoBiologiX Inc. (*Chapel Hill*) develops targeted chemotherapeutics to treat cancer using nanotechnology.

www.nanobiologix.com

NanoDiagnostic Technology LLC (*Kannapolis*) is developing a handheld biomonitoring device incorporating a functionalized nanoparticle and a lateral flow test strip to detect environmental exposure to organophosphate in a blood sample.

NanoMedica LLC (*Winston-Salem*) provides ultrasensitive detection reagents and nanotechnology-based drug discovery services and tools to biopharmaceutical companies as well as DNA and RNA sequencing services.

www.nanomedica.com

NanoVector Inc. (*Raleigh*) is commercializing a plant virus nanoparticle to develop a family of targeted-delivery, small-molecule cancer drugs.

www.nanovectorinc.com

Natland International Corp. (*Morrisville*) provides contract research synthesis of pharmaceuticals and custom organic chemicals.

www.natland.com

Natural Discoveries Inc. (*High Point*) provides biologically-active natural products from remote areas of the world for analysis, research and manufacturing to the pharmaceutical, agricultural and natural products industries.

www.natdiscov.com

Natural Products & Glycotechnology Research Institute Inc. (*Pittsboro*) develops new methods for the synthesis of oligosaccharides to be used in the development of vaccines or diagnostic tools, and also in improved synthesis of ribonucleotides.

Nature's Pearl Corp. (*Advance*) manufactures nutraceutical and cosmeceutical products from muscadine grape seeds and skins. Its products are manufactured in a cGMP facility and have been studied in clinical trials for efficacy.

www.naturespearlproducts.com



**WE UNDERSTAND
YOUR NEEDS ARE UNIQUE
- SO ARE OUR SOLUTIONS**

Providing an unparalleled range of contract pharmaceutical development and manufacturing services globally for over 40 years

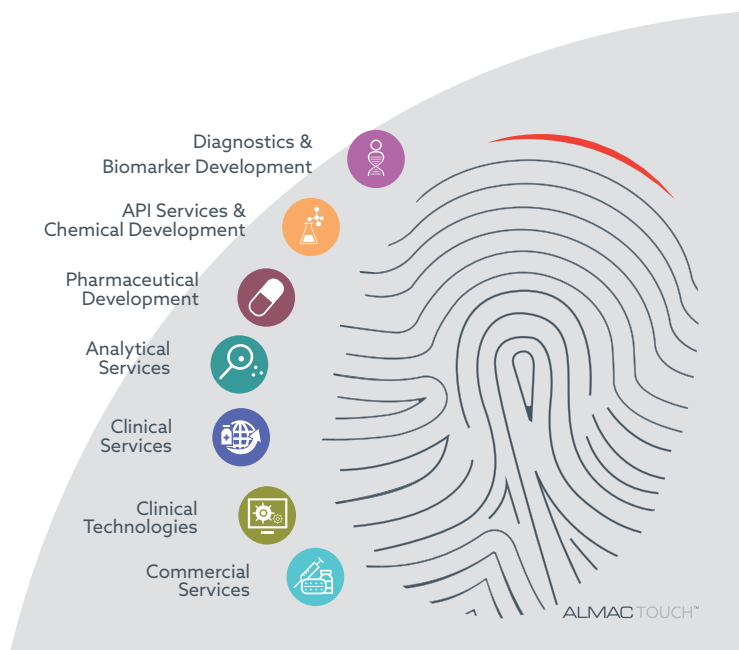
Durham, NC Office
4204 Technology Drive
Durham, NC 27704

GET IN TOUCH

UK (Global Headquarters)
+44 28 3833 2200
info@almacgroup.com

US Headquarters
+1 215 660 8500
www.almacgroup.com

ASIA PACIFIC Headquarters
+65 6309 0720



NephroGenex Inc. (*Raleigh*) develops kidney disease therapeutics, with a focus on diabetic nephropathy.

www.nephrogenex.com

NeuroAnalytics LLC (*Durham*) provides testing and analysis of tobacco products.

NeuroNano Pharma Inc. (*Raleigh*) develops technologies for delivering macro-molecules across the blood-brain barrier. NeuroNano's patented nano-polymers combine with peptides and proteins for several CNS indications.

www.neuronanopharma.com

NeuroPro Therapeutics Inc. (*Bahama*) is developing a novel, nanoparticle-based imaging technique for the treatment of epilepsy.

NeuroRepair Therapeutics Inc. (*Research Triangle Park*) develops drugs for multiple sclerosis, with a lead compound that shows activity in neuroprotection, remyelination and neuroregeneration.

Neuroscience Research Institute of North Carolina (*Winston-Salem*) is a non-profit corporation that conducts NIH-funded research on brain functions, alcoholism, Parkinson's disease, schizophrenia and pain regulations.

NeuroTronik Inc. (*Durham*) develops medical technology for the treatment of acute heart failure syndrome.

Nexgen Biosciences (*Raleigh*) is developing next generation anti-infective therapeutics effective against antibiotic-resistant strains of micro-organisms.

www.nexgen-bio.com

NIRvana Sciences Inc. (*Research Triangle Park*) is commercializing fluorescent dyes for use in medical diagnostics and optical imaging tests.

www.nirvanasciences.com

Nitta Gelatin NA Inc. (*Morrisville and Fayetteville*) manufactures food, pharmaceutical and technical gelatin, and is the maker of beMatrix Low Endotoxin Gelatin. beMatrix is used in the fields of regenerative medicine, medical devices and scientific research. Nitta Gelatin's Fayetteville plant produces 3,000 tons of pharmaceutical and food-grade gelatins per year.

www.nitta-gelatin.com

North Carolina Clinical Research (*Raleigh*) conducts phase one through four trials at its outpatient clinical research facility. Study indications include allergy (seasonal and perennial), asthma, COPD, vaccine, migraine and bioequivalent studies.

www.nccr.com

North Carolina Microbiology Laboratory (*Lincolnton*) offers microbiology testing services for the indoor air quality and wood products industries. Services include fungal identification, bacterial identification and product decay resistance characterization.

www.ncmlab.com

Nova Synthetix Inc. (*Durham*) is developing and commercializing a nontoxic castor plant that produces a unique fatty acid used as a high-value chemical feedstock. They contract with growers and are developing downstream markets for their castor product.

Novametics (*Raleigh*) develops and manufactures blood coagulation diagnostic products.

www.novametics.com

Novan Inc. (*Durham*) develops nitric oxide-releasing nanoparticle technology, which has therapeutic potential in applications related to immune system response, wound healing and blood pressure regulation.

www.novantherapeutics.com

NovaTarg Inc. (*Research Triangle Park*) is discovering and developing new drugs for the treatment of Type 2 diabetes, polycystic kidney disease and ovarian cancer.

www.novatarg.org

Novella Clinical, a Quintiles company (*Morrisville and Wilmington*) provides CRO support services to small and mid-sized oncology and medical device companies of all sizes. Services range from protocol development through final clinical study report.

www.novellaclinical.com

Novex Innovations LLC (*Winston-Salem*) is a contract development and manufacturing organization (CDMO) supporting small and startup life science companies in the development of their products, from conceptual through manufacturing and commercialization.

www.novexinnovations.com

Novo Nordisk Pharmaceutical Industries Inc. (*Clayton*) manufactures insulin, GLP-1 products and prefilled delivery devices for the treatment of diabetes.

www.novonordisk-clayton.com

Novocor Medical Systems Inc. (*Chapel Hill*) is developing a rapid chilling device for inducing therapeutic hypothermia in cardiac arrest, heat stroke and heavily concussed patients.

www.novocor-med.com

Novozymes BioAg (*Morrisville*) develops microbial-based biofertility, biocontrol and bioyield enhancer products for agriculture.

www.bioag.novozymes.com

Novozymes North America Inc. (*Franklinton*) researches, develops and manufactures enzymes, microorganisms and biopharmaceutical ingredients which are used in more than 30 industries including agriculture, baking, biofuels, brewing, detergents, food, feed and textiles.

www.novozymes.com

NPBiosciences LLC (*Research Triangle Park*) develops platforms based on humanized mice to accelerate discovery and development of novel therapies.

www.npbiosciences.com

NuBioPharma LLC (*Sanford*) is researching and developing non-steroidal anti-inflammatory drugs to treat osteoarthritis, rheumatoid arthritis and juvenile rheumatoid arthritis.

www.nubiopharma.com

Nufarm Americas Inc. (*Morrisville*) manufactures and markets insecticides, fungicides, plant growth regulators and herbicides. This site serves as Nufarm's primary research and development facility in the United States.

www.nufarm.com

Nutra-Pharma Manufacturing Corp. of N.C. (*Lexington*) manufactures vitamins, supplements and other wellness products.

Nutrasorb NC LLC (*Kannapolis*) develops and markets a broad range of functionally-enhanced, high-quality ingredients with naturally-concentrated, stabilized, and bioavailable phytoactives from fruits and vegetables.

www.nutrasorb.com

Oak-Bark Corp. (*Riegelwood*) develops and manufactures semi-bulk and bulk chemicals, specializing in organosulfur products.

www.oak-bark.com

Ocera Therapeutics Inc. (*Durham*) is a clinical-stage biopharmaceutical company focused on the development and commercialization of proprietary compounds to treat acute and chronic orphan liver diseases.

www.ocerainc.com

Ocis Biotechnology Inc. (*Wilmington*) develops nanobiotechnology based on marine chemistries to repair, renew and regenerate extracellular matrix by stimulation of in vivo collagen production.

www.ocisbiotech.com

OncoTAB Inc. (*Charlotte*) develops and commercializes diagnostic blood tests designed to detect breast cancer.

www.oncotab.com

Oncotide Pharmaceuticals Inc. (*Research Triangle Park*) discovers and develops immunotherapeutic drugs that directly activate tumor suppressors, the same tumor suppressors activated by checkpoint inhibitor antibodies. Oncotide has also developed a companion diagnostic.

www.oncotide.com

OnSite Remediation LLC (*Cary*) develops and uses naturally-occurring microbes, mechanical separators, coalescing units and filtration systems for the removal of contaminants from water and soil.

www.onsiteremediation.com

OpAns LLC (*Durham*) provides analytical services to support discovery, preclinical, toxicology and clinical studies.

www.opans.com

Oriel Therapeutics Inc., a Sandoz company (*Durham*) develops respiratory products as generic alternatives to patented drugs for asthma and COPD. It also develops and commercializes pre-metered unit and multi-dose dry powder delivery systems.

www.us.sandoz.com



EYE ON DISCOVERY
Life Science companies are discovering what Eastern North Carolina has to offer

NCEastAlliance

Qualified workforce as validated by site location consultant in 2009 - updated in 2015

STEM education and training programs beginning in middle schools advancing through AAS, BS, MS, and PhD degrees from major research university

Roughly \$2 billion of investment announced by existing companies within 40-mile radius of Wilson, NC creating more supplier opportunities

1.800.474.8499 | NCEAST.ORG



Learn More About Our Life Science Cluster

 **Wake Forest[®]**
innovation
quarter



Work. Live. Learn. Play.

Wake Forest Innovation Quarter in Winston-Salem, North Carolina, is a unique place for research, business and education in biomedical science, information technology, clinical services and advanced materials.

With over 1.5 million square feet of inspirational office, laboratory and educational space on its 145 developable acres—and hundreds of apartments, lofts and condominiums a quick walk away—we invite you to experience the Innovation Quarter for yourself.

InnovationQuarter.com





MEDICAL MURRAY

OrthoMend Inc. (*Wilmington*) develops and commercializes regenerative bone fixation technology, including bio-absorbable pins and screws reinforced with nanodiamonds to mimic titanium. A second generation screw will deliver therapeutics directly to the affected bone.

Orthovative Technologies (*Winston-Salem*) has developed a nanotechnology-enabled device used to diagnose and minimize back pain.

www.orthovativetechnologies.com

Osmotica Pharmaceutical Corp. (*Wilmington*) specializes in drug-delivery technologies and neurology-based therapies, including a treatment for Parkinson's disease.

www.osmotica.com

Pace Analytical Services Inc. (*Raleigh and Asheville*) provides environmental testing services specializing in bioassay, metals, wet chemistry, microbiology and organics from its laboratory in Raleigh. The Asheville laboratory provides inorganic and aquatic toxicity testing services, as well as sampling services for groundwater, wastewater and soil.

www.pacelabs.com

Panacea BioMatx Inc. (*Morrisville*) creates and sells customized nutritional supplement formulas in personalized gel-packs.

www.panacea.me

PAREXEL International Corp. (*Durham*) provides drug-development and launch services, including clinical development, integrated advanced technologies, regulatory affairs consulting and commercialization services.

www.parexel.com

Parion Sciences Inc. (*Durham*) develops therapies to treat defects of the innate mucosal defense system in respiratory and ophthalmology diseases.

www.parion.com

Path BioAnalytics Inc. (*Chapel Hill*) develops rheological assays for testing trans-mucosal drug delivery systems, mucolytic compounds, inhaled medications for respiratory diseases, antimicrobials and treatments for diseases that impact the body's mucosal layers.

www.pathbioanalytics.com

Patheon (*Durham and Greenville*) provides contract development and commercial manufacturing services for a full array of solid and sterile dosage forms, including small molecule API and biologic drug substances. Patheon's Greenville site manufactures sterile injectables (liquid and freeze-dried) and solid-dose tablets and capsules. It also offers stability storage, stability testing and development for small-molecule APIs and large-molecule biologics.

www.patheon.com

Pathfinder Pharmaceuticals Inc. (*Durham*) specializes in early stage drug discovery, with a focus on cancer therapy.

www.pathfinderpharma.com

Patrin Pharma Inc. (*Salisbury*) develops pharmaceutical products, primarily oral dosage forms for gastrointestinal, cardiovascular, antiviral, antibacterial and central nervous system indications.

www.patrinpharma.com

Pearl Therapeutics Inc. (*Durham*) a subsidiary of AstraZeneca, develops combination therapies and formulations of inhaled drugs for chronic respiratory diseases such as asthma and COPD.

www.pearltherapeutics.com

Peptagen Inc. (*Raleigh*) develops nasally-administered cytotoxic T-lymphocyte nanoparticle vaccines for the prevention and treatment of pathogenic diseases and cancer, with a lead program in treatment of HIV/AIDS-related illness.

www.peptagen.com

Pfizer Inc. (*Sanford*) manufactures clinical trial and commercial drug substance materials for conjugate vaccines.

www.pfizer.com

PharmaCore Inc. (*High Point*) performs chemistry services for the pharma and biotech industries. Services include custom organic synthesis, cGMP scale-up, nonGMP and GMP API manufacture, controlled substance R&D and manufacture, and chemical process research.

www.pharmacore.com

PharmaDirections Inc. (*Cary*) provides virtual drug development services, offering scientific and management consulting for drug development and project management with a focus on preclinical, CMC and regulatory services.

www.pharmadirections.com

PharmAgra Labs Inc. (*Brevard*) conducts contract R&D in organic chemistry for pharma, biotech and other industries. The company also offers cGMP services including the preparation of drug substances for use in clinical trials as well as low-volume API manufacturing.

www.pharmagra.com

PharmaLogika Inc. (*Willow Springs*) develops, manufactures and markets prescription medication and medical devices primarily for neurological diseases, as well as over-the-counter medications and supplements for humans and animals.

www.pharmalogika.com

Pharmgate Animal Health LLC (*Wilmington*) develops and markets medicines for the control of disease in livestock and poultry in North America.

www.pharmgateah.com

Pharm-Olam International (*Research Triangle Park*) provides phase one through four clinical research services to the pharmaceutical, biotech and medical device industries.

www.pharm-olam.com

Phenogen Sciences Inc. (*Charlotte*) provides predictive testing and risk assessment tools that help physicians proactively manage patient health.

www.phenogensciences.com

Physcient Inc. (*Durham*) develops new surgical tools designed to decrease tissue damage. Physcient is developing a dissector that differentiates between tissue types for laparoscopic, thoracic, endoscopic, plastic and general surgery.

www.physcient.com

Physicians Laboratories (*Kernersville*) produces and distributes Revival Soy protein products and diet products.

www.soy.com

PhytoChem Pharmaceuticals Inc. (*Cary*) is developing a prescription medical food for the treatment of metabolic processes and inflammation involved in breast cancer recurrence.

www.phytochem.com

Phytonix Corp. (*Black Mountain*) develops and commercializes technologies and manufacturing processes that photosynthetically convert CO₂, with solar energy and water, into low-cost chemicals and fuels like n-butanol.

www.phytonix.com

PhytoPharmacon Inc. (*Garner*) derives natural ingredients from botanical sources and specializes in development, from agronomy through pilot scale processing, and high-volume supply of natural products for the food and cosmetic industries.

www.phytopharmacon.com

Piedmont Animal Health LLC (*Greensboro*) a part of Piedmont Pharmaceuticals, develops and licenses animal-health therapeutics with a focus on parasitology and drug delivery systems.

www.piedmontanimalhealth.com

Piedmont Biofuels (*Pittsboro*) produces and distributes biofuel, researches enzymatic processes for more efficient feedstock-to-fuel conversion, provides laboratory testing to other biodiesel producers and offers consulting services to the industry.

www.biofuels.coop

Pine Laboratories LLC (*Durham*) provides analytical testing and development services for pharmaceutical, biopharmaceutical, medical devices, cosmetic, food and chemical industries. Pine Labs is a cGMP compliant lab specializing in ion chromatography.

www.pinelaboratories.com

Pique Therapeutics Inc. (*Durham*) develops therapeutic vaccines for the treatment of cancer.

www.piquetherapeutics.com

Pisgah Labs Inc. (*Pisgah Forest*) manufactures active pharmaceutical ingredients on a contract basis. Pisgah Labs' cGMP facility includes an aseptic manufacturing suite.

www.pisgahlabs.com

Plant Health Care Inc. (*Raleigh*) provides novel biological products and technologies to promote plant health and increase crop yields.

www.planthealthcare.com

Plureon Corp. (*Winston-Salem*) develops a technology platform based on pluripotent stem cells extracted from amniotic fluid and placenta. These cells may be used in regenerative medicine and other therapies.

www.plureon.com

Polyzen Inc. (*Apex*) is a contract manufacturer that designs, develops, and manufactures polymer-based medical devices. Polyzen has polymer processing capabilities for prototyping and volume production.

www.polyzen.com

Powered Research LLC (*Research Triangle Park*) provides contract research services to life sciences companies using both established and novel nonclinical models.

www.poweredresearch.com

PPD (*Wilmington and Morrisville*) provides drug discovery, development, lifecycle management and laboratory services to pharmaceutical, biotechnology, medical device, academic and government organizations.

www.ppd.com

PRA Health Sciences (*Raleigh*) provides clinical research and trial services for all phases of clinical development.

www.prahs.com

Practichem LLC (*Morrisville*) develops chromatography instruments that are able to be controlled remotely, and associated consumables, including protein chromatography, flash and preparative chromatography and sample loading technology.

www.practichem.com

Since 1989, NCBiotech has provided more than \$30 million in low-interest loans to young life science companies. These companies have subsequently raised more than \$3.4 billion in additional funding.

Precision BioSciences Inc. (*Durham*) develops technology to produce custom, genome-editing enzymes for human health and biological research. The technology is called Directed Nuclease Editor.

www.precisionbiosciences.com

Precision Diagnostics Inc. (*Cary*) manufactures and distributes PrecisiBand products, a biocompatible material that degrades in situ and releases drugs or compounds while protecting wounds.

www.precisiband.com

Precision PlantSciences Inc. (*Durham*) develops Precision Biosciences' technology, called Directed Nuclease Editor, to site-specifically insert or remove traits at a user-defined location in the genome of row crops, biofuel feedstocks and other plants.

www.precisionbiosciences.com

Premier Research (*Research Triangle Park*) provides clinical development services for biotech and specialty pharma companies, with a focus on analgesia, CNS, oncology, pediatric and rare disease research.

www.premier-research.com

Premitec Inc. (*Raleigh*) is a biomedical research and development company that focuses on development of flexible neural interfaces, implantable biosensors, and packaging solutions for these devices.

www.premitec.com

Procter & Gamble (*Greensboro*) manufactures Vicks and other over-the-counter products.

www.pg.com

Pulmonix LLC (*Greensboro*) conducts phase two to phase four clinical trials in pulmonary, asthma, sleep and critical care medicine.

www.pulmonixresearch.com

Purdue Pharma Manufacturing LP (*Durham and Wilson*) develops pharmaceuticals to treat pain. The Durham location is an oral solid dosage manufacturing plant. The Wilson plant manufactures, packages and distributes oral solid-dose tablets, and is the company's distribution center for prescription products.

www.purduepharma.com

QOL Medical LLC (*Raleigh*) commercializes existing and complementary new orphan products for metabolic disease and pediatric gastroenterology.

www.qolmed.com

QPS Hepatic Biosciences (*Research Triangle Park*) specializes in hepatocyte research, drug metabolism, drug transporter services and in vitro drug-drug interactions.

www.qps.com

Qualiber Inc. (*Chapel Hill*) develops nanotechnologies to solve drug delivery challenges for nucleic acid-based therapeutics, such as DNA and mRNA, with a focus on cancer, hepatitis and liver diseases.

www.qualiberinc.com

Qualicaps Inc. (*Whitsett*) manufactures empty two-piece capsules (gelatin and hypromellose) and encapsulation equipment under cGMP regulations for use by pharmaceutical, OTC and dietary-supplement manufacturers.

www.qualicaps.com

Qualitest Pharmaceuticals Inc. (*Charlotte*) manufactures generic pharmaceuticals. The company's solid-dose manufacturing facility in Charlotte also includes laboratory space for quality control and R&D.

www.qualitestrx.com

Quality Chemical Laboratories (*Wilmington*) offers contract analytical and microbiological testing services to pharmaceutical companies, including raw-material and finished-product testing, stability testing, method development, validation and custom synthesis.

www.qualitychemlabs.com

Qualyst Transporter Solutions LLC (*Durham*) develops and commercializes cell-based drug toxicity-testing products used in pharmaceutical development, based on its proprietary hepatocyte technologies.

www.qualyst.com

QuarTek Corp. (*Asheboro*) develops nanotechnology processes with applications in antimicrobials, advanced textiles, nanosensors, diagnostics and biofuels. The company also provides accelerator services for startup nanotechnology companies.

www.quartekcorp.com

Quintiles (*Durham*) is a contract research organization that provides product development and integrated healthcare services, including commercial and observational solutions, for pharmaceuticals, biosimilars and medical devices.

www.quintiles.com

Radiant Neurosciences LLC (*Durham*) develops medicines to treat neurodevelopmental disorders in children.

Redbud Labs (*Chapel Hill*) develops technologies based on a patented ASAP platform, which has applications for transfusion diagnostics, fertility testing, small-volume assays and specimen preparation.

www.redbudlabs.com

RegenMedTX LLC (*Winston-Salem*) is developing cell therapy products that use a patient's own cells to restore damaged kidney tissues by engrafting into, repairing or replacing damaged tissues or organ.

www.regenmedtx.com

Relion Manufacturing Inc. (*Asheville*) provides contract packaging and manufacturing services, including validation and regulatory consulting for medical device, pharmaceutical and cosmetic manufacturers.

Renovion Inc. (*Research Triangle Park*) develops therapies for chronic inflammatory airway diseases.

www.renovion.com

Repreve Renewables LLC (*Greensboro*) develops and markets giant miscanthus as a high-yielding biomass crop.

www.repreverenewables.com

Research Triangle Park Laboratories Inc. (*Raleigh*) provides contract analytical laboratory services for the environmental, pharmaceutical, biotechnology, dietary supplements and manufacturing industries.

www.rtp-labs.com

RF Wastewater (*Raleigh*) focuses on biological wastewater treatment, using lignocellulosic materials as biofilm media for activated sludge system retrofits and upgrades.

www.rfwastewater.com

Rho (*Chapel Hill*) provides clinical development and contract research services to the biotechnology, pharmaceutical and medical device industries.

www.rhoworld.com

Ribometrix LLC (*Chapel Hill*) has developed RNA structure probing tools for translational research, biomarker analysis and therapeutic discovery. In addition to research kits for RNA structure analysis, the company uses its platform to develop novel therapeutic targets.

www.ribometrix.com

RiboWiz Scientific Inc. (*Raleigh*) uses a proprietary modeling platform to develop custom proteins for biotechnology applications.

www.ribowiz.com

Rockwell Automation Life Sciences (*Cary*) provides automation control, process optimization and execution systems for manufacturers. Rockwell's Cary location is the headquarters for the Americas life sciences division.

www.rockwellautomation.com/global/industries/life-sciences/overview.page

RTI Health Solutions (*Research Triangle Park*) is a non-profit organization that provides biopharmaceutical companies clinical research services and research and consulting in health economics, outcomes research, market access, epidemiology and drug safety.

www.rtihs.org

RTI International (*Research Triangle Park*) is an independent, non-profit institute that provides research and technical services to governments and businesses, including drug discovery and development, analytical chemistry, and medical device and diagnostics research.

www.rti.org

RTI Surgical Inc. (*Greenville and Raleigh*) develops and provides surgical implants, including biologic, metal and synthetic implants.

www.pioneersurgical.com

SabioAdvantec LLC (*Raleigh*) offers contract R&D services from concept through prototype development for medical devices, medical robotics, biomedical 3D printing and process automation.

www.sabioadvantec.com



SafeRay Spine LLC (*Durham*) develops medical imaging devices that may help to reduce radiation exposure and improve the safety of fluoroscopy procedures.

www.lessray.com

Salix Pharmaceuticals Inc. (*Raleigh*) develops and markets prescription pharmaceutical products for the treatment of gastrointestinal diseases.

www.salix.com

Salzburg Therapeutics Inc. (*Yadkinville*) is developing systems that deliver activated forms of anticancer drugs, nucleic acid drugs, and nanoparticles directly to cancer cells.

www.sztipharm.com

Sandoz Inc. (*Wilson*) manufactures oral-dosage generic pharmaceuticals.

www.us.sandoz.com

Sanesco International Inc. (*Asheville*) develops clinical tools for healthcare providers, such as neuroendocrine analytical testing, nutritional support formulas and patient-centered clinical review. The NeuroLab division conducts research and development of in vitro diagnostic tools.

www.sanescohealth.com

SciInt'l LLC (*Greensboro*) develops computation technologies to screen chemicals and target databases in order to identify and optimize leads for preclinical candidates. SciInt'l's technologies can also be used to discover small-molecule enzyme activators.

www.SciInt'l.com

Scientific Analytical Institute Inc. (*Greensboro*) conducts environmental, indoor air quality, forensic and materials testing.

www.sailab.com

SciKon Innovation Inc. (*Research Triangle Park*) creates and distributes life science products that replicate the performance of human organ systems using microfluidic devices. SciKon's products simulate pharmacokinetics in vivo in order to predict human responses to toxicants and drugs.

www.scikoninnovation.com

Scioderm Inc., an Amicus Therapeutics Company (*Durham*) develops drugs to treat skin diseases with high unmet need.

www.sderm.com

Every dollar NCBiotech distributes in grants to universities and similar institutions to help commercialize life science ideas is met with an average \$28 in follow-on funding, such as NIH grants

COMPANIES Sc – St

SciOme LLC (*Research Triangle Park*) develops bioinformatics, chemoinformatics and text mining solutions and provides consulting services.
www.sciome.com

Sciteck Inc. (*Fletcher*) provides forensic drug testing services and diagnostic products. Sciteck develops, manufactures and sells products for biotechnology, urinalysis, clinical chemistry, toxicology, pharmaceuticals, treatment and safety applications.
www.sciteck.org

ScitoVation LLC (*Research Triangle Park*) supports and advances research on the effects of chemical compounds on human health. ScitoVation works with clients to develop safer pharmaceuticals, food ingredients, agricultural chemicals, commodity chemicals and consumer products.
www.scitovation.com

Seachaid Pharmaceuticals Inc. (*Mebane*) is a clinical-stage company that discovers and develops human therapeutics.
www.seachaid.com

SeaTox Research Inc. (*Wilmington*) develops bioassays for the detection of marine toxins and conducts pharmaceutical development through bioprospecting.
www.seatoxresearch.com

Selexys Pharmaceuticals Corp. (*Morrisville*) develops therapeutics for the treatment of inflammation, thrombosis and metastasis across a broad range of severe diseases.
www.selexys.com

SenGenix Inc. (*Durham*) develops point-of-care blood diagnostic tests using fluorescently-responsive sensors.
www.sengenix.com

Sentiens LLC (*Charlotte*) develops nutraceutical products targeting addictive behavior.
www.sentiens.us

SePRO Research & Technology Campus (*Whitakers*) acquires, develops, manufactures, and markets products for aquatics and horticulture. SePRO's research and technology campus in Whitakers is the primary research and development site for the company.
www.sepro.com

Seqirus, a CSL Company (*Holly Springs*) produces seasonal flu cell culture vaccine, pre-pandemic and pandemic vaccines.
www.seqirus.com

Serum Source International Inc. (*Charlotte*) supplies animal serum for life science cell culture research, contract research laboratory use, bioprocessing and product development.
www.serumsourceintl.com

Shoaf Scientific Consultants Inc. (*Lexington*) provides research and IP development services in plant redox bioenergetics, antimicrobial technologies, nanotoxicology of biomimetic polymers and molecular photochemical studies.
www.shoafbiochem.com

Shure Foods Inc. (*Greenville*) produces cold-structured crab by treating the uncooked crab meat with a protein binding agent.
www.shurefoods.com

SightLife (*Winston-Salem*) provides corneal endothelial cells for transplantation, as well as related supplies and devices. It is an FDA-registered human tissue establishment.
www.ocularsystemsinc.com

SiNON Therapeutics (*Research Triangle Park*) develops a nanoparticle to improve drug localization to the brain.
www.sinontp.com

SipcamAdvan (*Durham*) develops and manufactures herbicides, pesticides, fungicides and biocides.
www.sipcamadvan.com

SIRGA Advanced Biopharma Inc. (*Research Triangle Park*) discovers and develops small-molecule drugs to treat HIV and other drug-resistant infectious diseases.
www.digitalharmonydesign.com/SigraAB/

Smart Perfusion LLC (*Denver*) is developing an organ perfusion device that extends the time an organ is viable ex vivo and that monitors metrics that validate organ viability.
www.smartperfusion.com

SmartFlow Technologies Inc. (*Apex*) provides TFF filtration, separation and purification for the biotechnology, biopharmaceutical processing, biofuels, animal healthcare, dairy processing, enzyme manufacturing, food processing and wastewater industries.
www.smartflow-tech.com

SmartGene Inc. (*Raleigh*) provides web-based software solutions for the management, analysis and interpretation of genetic sequences, to identify and characterize bacteria, fungi and viruses. Customers include diagnostic labs, medical centers and sterile manufacturers.
www.smartgene.com

SMG Pharmaceuticals LLC (*Cary*) commercializes and develops products from phase two to market, with a current focus on a topical antimicrobial that treats MRSA, gram positive and negative bacteria and fungal infections.
www.smgpharma.com

Smithers Viscient LLC (*Snow Camp*) provides environmental testing services for the pharmaceutical, veterinary, agriculture, chemical and personal-care industries. This site conducts avian and wildlife toxicology testing.
www.smithersviscient.com

Solutex NA LLC (*Winston-Salem*) makes highly-refined omega-3 APIs for the pharmaceutical and nutritional markets. The Winston-Salem location is a sales and development office for the company.
www.solutex.es/en/

SonoVol LLC (*Durham*) is developing preclinical imaging technology that can be applied to the animal models researchers use to evaluate the efficacy and toxicity of new drugs before they enter clinical trials.
www.sonovol.com

Southcot Inc. (*Research Triangle Park*) prepares biological agents for the detection of tissue hypoxia at the cell level in normal and malignant tissues
www.hypoxyprobe.com

In March 2016 Novo Nordisk started building a \$1.8 billion production facility for diabetes medicines at its Clayton site -- the single largest manufacturing investment in North Carolina history -- that will create 700 high-paying jobs, doubling its workforce there.

Southeastern Laboratories Inc. (*Goldsboro*) provides research and laboratory support to water and wastewater-treatment companies. SEL's analytical services include microbiological and chemical testing.

www.selaboratories.com

Southern Research Institute - Advanced Energy & Transportation Technologies

(*Durham*) provides research and analytical services and facilities to government and commercial clients involved in energy, fuel and transportation technology development.

www.southernresearch.org

SOV Therapeutics Inc. (*Morrisville*) develops therapeutic treatments, with a focus on oral testosterone replacement therapies for adult men.

www.sovtherapeutics.com

SoyMeds Inc. (*Davidson*) is developing a seed-based expression platform that enables production of protein-based targets that can be used to diagnose and treat disease and address other unmet needs in the healthcare industry.

www.soymeds.com

Spin-Darc LLC (*Raleigh*) develops and markets a portable device for automated, real-time biodetection of microbial or chemical contaminants with potential applications in healthcare, veterinary medicine, the food industry, environmental monitoring and biodefense.

www.spindarc.com

Spirovention Inc. (*Chapel Hill*) is a specialty CRO with a focus on the development of breakthrough drugs in respiratory medicine.

www.spirovention.com

Sprout Pharmaceuticals, a division of Valeant Pharmaceuticals (*Raleigh*) develops and markets a compound to treat hypoactive sexual desire disorder.

www.addyi.com

Spyryx Biosciences Inc. (*Durham*) is developing disease-modifying therapies for obstructive lung disease based on the natural fluid control mechanism in the lung. The company's initial focus is on cystic fibrosis.

www.spyryxbio.com

Sterigenics (*Charlotte and Haw River*) provides ethylene oxide sterilization and gamma radiation sterilization for medical and pharmaceutical products.

www.sterigenics.com

Stiefel, a GSK company (*Research Triangle Park*) develops prescription and OTC skin-care therapies. The company's primary research and development facility is in RTP.

www.stiefel.com

Structure Medical Inc. (*Mooresville*) is a contract manufacturer of orthopedic medical devices, including implantable orthopedic fracture fixation and spinal instrumentation products.

www.structuremedical.com

N.C. has world-class life science workforce training programs, including the community colleges' BioNetwork, the BTEC biomanufacturing site at NCSU, and the BRITE program at NC Central.



MAGGIE QUAN, PhD

919-645-1431

mquan@trademarkproperties.com

WELCOME

MAGGIE QUAN, PhD

Real Estate Advisor

TradeMark Properties is pleased to announce the addition of Maggie Quan. With a PhD degree in Biomedical Engineering from Duke University and extensive work experience as a Director for a successful biotech startup, Maggie not only has comprehensive knowledge of the biotechnology industry, but also understands all aspects of technology incubation process and production pipeline.

Maggie is committed to helping clients' with their real estate needs for office, laboratory, warehouse/flex space with unparalleled ethics and dedication to details. She is also fluent in Mandarin and working with many global investors looking to enter the Carolinas commercial real estate market.

TradeMark Properties is a full service commercial real estate firm offering comprehensive client solutions:

Landlord & Tenant Representation Leasing • Investment Sales

Property Management • Special Asset Solutions •

Commercial Association Management

1001 Wade Ave., Suite 300
Raleigh, NC 27605
919.782.5552
www.trademarkproperties.com

TRADEMARK  **PROPERTIES**
As if it's our own®



SYNSHARK

Sun Dance Genetics LLC (*Durham*) has developed an improved and sustainable corn germplasm by transferring genes from a wild relative (gamagrass) into corn. They also developed high sugar gamagrass for efficient bioenergy conversion.

Suncare Research Laboratories LLC (*Winston-Salem*) provides services to sunscreen and dermatological product manufacturers, including evaluation of sunscreen SPF and UVA protection.

www.suncarelab.com

Surgilum LLC (*Wilmington*) designs, manufactures and markets medical instruments for use in cataract and refractive surgery.

www.surgilum.com

Sustainable Ethanol Technologies LLC

(*Waxhaw*) is commercializing low-cost, sustainable, cellulosic ethanol production.

www.sustainable-ethanol.com

Symberix Inc. (*Durham*) researches enzymes produced by the microbiome to develop drugs that would improve the efficacy of a range of therapeutics.

www.symberix.com

Symmetry Biosciences Inc. (*Research Triangle Park*) provides contract research and specialized chemistry services to the biotech, pharmaceutical, medical device, agrochemical and fine chemical industries.

www.symmetrybiosciences.com

Symune Therapeutics LLC (*Durham*) develops vaccines and treatments for respiratory diseases using technology that augments the immune system while reducing the inflammatory response.

www.symmune.com

Synchrony Labs LLC (*Durham*) is an AAALAC-accredited large-animal, preclinical contract research organization. It provides preclinical testing services, specializing in models for safety, toxicology and efficacy studies.

www.synchronylabs.com

Synereca Pharmaceuticals Inc. (*Chapel Hill*) develops orally active drugs that restore or increase the effectiveness of existing antibiotics.

www.synereca.com

Syngenta Crop Protection LLC (*Research Triangle Park and Greensboro*) works to increase plant yield by developing products for insect control and drought tolerance. Research Triangle Park is the company's central location for biofuels product development and includes the Advanced Crop Research Lab.

www.syngenta-us.com

Synpac Inc. (*Durham*) is developing a drug for the treatment of Pompe disease.

SynShark LLC (*Cornelius*) is developing a method for extracting squalene from tobacco. Squalene is a specialty chemical typically derived from shark livers used for vaccines and cosmetics.

www.synshark.com

SynteractHCR Inc. (*Morrisville*) provides customized, full-service phase one through four clinical development services internationally across multiple therapeutic areas.

www.synteracthcr.com

Synthon Pharmaceuticals Inc. (*Durham*) develops and manufactures generics, as well as specialty pharmaceuticals and biosimilars in key therapeutic areas of oncology and multiple sclerosis. The Durham location is a regulatory office.

www.synthon.com

Synthonix Inc. (*Wake Forest*) designs, manufactures and markets molecules to aid in drug discovery.

www.synthonix.com

T3D Therapeutics Inc. (*Research Triangle Park*) is developing a disease-modifying drug therapy for Alzheimer's disease that may improve multiple disease defects. The drug also demonstrates potential as a therapy for nonalcoholic steatohepatitis (NASH).

www.t3dtherapeutics.com

TAB Clinical Trials (*Cary*) provides global clinical trial support from pre-IND stage of development to postmarket approval for drugs and devices. TAB Clinical also provides drug safety and pharmacovigilance services in the US and EU through a QPPV partner.

www.tabclinical.com

Life science companies make good neighbors: clean, quiet, their employees are smart and they pay about \$1.8 billion a year in state & local taxes.

TearScience Inc. (*Morrisville*) develops technologies to improve identification, diagnosis, and treatment of Meibomian Gland Dysfunction.

www.TearScience.com

Technology Crops International (*Winston-Salem*) designs, evaluates and develops specialty plant-derived oils for food, chemical, dietary supplement and personal care uses. The company manages the supply chain from "soil to oil," providing traceability, consistent demand and quality control.

www.techcrops.com

Teleflex Medical (*Research Triangle Park*) designs, manufactures and distributes medical devices, surgical instruments and disposable medical products.

www.teleflex.com

Tem Systems Inc. (*Research Triangle Park*) distributes the ROTEM delta blood hemostasis analyzer, developed by its parent company TEM International.

www.rotem-usa.com

Tenax Therapeutics Inc. (*Morrisville*) develops and commercializes pharmaceutical products for the critical care market.

www.tenaxthera.com

TEO Systems Inc. (*Greenville*) develops and sells optical and electronic devices and systems, including a label-free flow cytometer instrument for rapid analysis of biological cells and small particles.

Tergus Pharma LLC (*Durham*) provides topical and semi-solid development, formulation, analysis and testing services, with expertise in IVRT method development. The company has cGMP manufacturing, phase one through four clinical supplies and logistics capabilities.

www.terguspharma.com

TerraStar Energy (*Lumberton*) provides turn-key systems to reduce waste and convert it to biogas, electricity, liquid fuels, and solid and liquid fertilizers. Systems include anaerobic digestion, gasification, pyrolysis and boilers.

www.terrastarenergy.com

Tersus Environmental LLC (*Wake Forest*) develops and markets technologies for the remediation of soil and groundwater. Services include aerobic bioremediation, bioaugmentation and cometabolic bioremediation.

www.tersusenv.com

Textile-Based Delivery Inc. (*Conover*) develops and manufactures fabrics that integrate controlled release matrices, offering topical and transdermal dosing of active ingredients.

www.texdel.com

TheraBionic LLC (*Winston-Salem*) is developing treatment approaches for cancer based on the use of tumor-specific modulation frequencies, with an initial focus in hepatocellular carcinoma.

www.therabionic.com

TheraLogics Inc. (*Hillsborough*) discovers and develops treatments for inflammatory diseases using human transcription factor NF-kB technologies.

TIRF Labs (*Cary*) develops, manufactures and markets a broad range of products based on total internal reflection fluorescence (TIRF), including add-on TIRF accessories for microscopy and spectroscopy, TIRF biosensors and fluorescence illuminators.

www.tirf-labs.com

Toxicology Services Inc. (*Chapel Hill*) works with small and mid-sized pharmaceutical companies and CROs to plan, conduct and summarize toxicology studies, including PK/ADME studies.

www.toxicologyservices.net

More than 80 agricultural biotechnology companies have put down roots in N.C., including international giants BASF, Bayer CropScience, Syngenta, and Novozymes.





Trana Discovery Inc. (*Cary*) provides a proprietary anti-infective drug discovery technology platform that enables its partners to discover new treatments of bacterial, viral and fungal infectious diseases in crops, animals and humans.

www.tranadiscovery.com

TransEnterix Inc. (*Morrisville*) designs and develops flexible instruments and robotics for use in minimally-invasive surgery.

www.transenterix.com

TransViragen Inc. (*Chapel Hill*) provides in vivo discovery research services, including the generation and analysis of genetically modified rodents and cell lines.

www.transviragen.com

Treyco Environmental Solutions (*Wilson*) created and manufactures a patented enzymatic degreaser product called TPP1.

www.treyco.net

Triangle Biofuels Industries Inc. (*Wilson*) produces biodiesel from virgin and waste vegetable oil, including locally-sourced soybean, canola, camelina and corn oils.

www.trianglebiofuels.com

Triangle BioSystems International (*Durham*) develops, produces, markets and supports biomedical signal processing products that advance the research and performance capabilities of its customers in the neurophysiology and ultrasound marketplace.

www.trianglebiosystems.com

Triangle Compounding Pharmacy (*Cary*) is a FDA Registered 503B Outsourcing Facility (cGMP) and PCAB-accredited pharmacy, specializing in compounding sterile and non-sterile preparations of study medications, in varied formulations, for clinical trials.

www.trianglecompounding.com

Triangle Research Labs LLC (*Research Triangle Park*) specializes in hepatocyte production for use in research focused on drug metabolism, drug-drug interactions, drug transporters and hepatotoxicity.

www.triangleresearchlabs.net

TriboFilm Research Inc. (*Raleigh*) develops low-friction, thin-film coating and lubrication platforms for medical devices and for the aerospace and marine industries.

www.tribofilmresearch.com

Tryton Medical Inc. (*Durham*) develops stent systems for the treatment of coronary artery bifurcation lesions.

www.trytonmedical.com

TyraTech Inc. (*Morrisville*) develops natural pesticides that are safe for humans and animals, by targeting invertebrate-specific receptors.

www.tyratech.com

Tyton NC Biofuels LLC (*Raeford*) is a biorefinery that uses corn and energy tobacco as feedstock for ethanol production.

www.tytonbiofuels.com

UCB Biosciences Inc. (*Raleigh*) develops therapeutics for the treatment of severe, life-threatening neurological and inflammatory diseases, including epilepsy, Parkinson's disease, rheumatoid arthritis, Crohn's disease, psoriatic arthritis, lupus and osteoporosis.

www.ucb.com

United Therapeutics Corp. (*Research Triangle Park*) develops and commercializes products to treat cardiopulmonary diseases, infectious diseases and cancer.

www.unither.com

Vascular BioSciences Inc. (*Durham*) is a biopharmaceutical company developing solutions for difficult-to-treat cardiovascular and inflammatory diseases.

www.vascularbiosciences.com

Vascular Pharmaceuticals Inc. (*Research Triangle Park*) develops and commercializes therapeutic products to treat secondary complications of diabetes.

www.vascularpharma.com

Velosal Medical Inc. (*Cary*) develops medical devices for enhancing and improving patient care in the critical care and emergency markets. Its first product is a video guided laryngoscope for use in tracheal intubations.

www.velosal.com

Verdesian Life Sciences LLC (*Cary*) develops agricultural products with a focus in plant health, inoculants, seed treatment and nutrition.

www.vlsci.com

Vertellus Specialties Inc. (*Greensboro*) manufactures specialty chemicals for the agriculture, nutrition, pharmaceutical, medical and personal care markets.

www.vertellus.com

Viamet Pharmaceuticals Inc. (Durham) discovers and develops small-molecule compounds that target metalloenzymes in infectious disease, oncology and crop protection.
www.viamet.com

ViiV Healthcare (Research Triangle Park) develops drugs to treat HIV infection and disease, in conjunction with parent companies GlaxoSmithKline and Pfizer.
www.viivhealthcare.com

Vijaya Pharmaceuticals LLC (Research Triangle Park) provides medicinal and synthetic organic chemistry services to the pharmaceutical and allied industries.
www.vijayapharma.com

ViraSource LLC (Research Triangle Park) propagates and purifies BSL-2 viruses and provides animal models of viral infections and antiviral immune responses.
www.virasource.com

ViraTree LLC (Research Triangle Park) acquires, authenticates, preserves, develops and distributes virological materials, information, and technology for the advancement of virus research.
www.viratree.com

Vital Plan Inc. (Raleigh) formulates and produces therapeutically-dosed natural supplements and herbal therapies for managing fibromyalgia, Lyme disease, chronic fatigue and pain and hormonal imbalances.
www.vitalplan.com

vTv Therapeutics LLC (High Point) discovers and develops drug candidates to fill significant unmet medical needs such as Alzheimer's disease, Type 2 diabetes and inflammatory disorders.
www.vtvtherapeutics.com

Waters Agricultural Laboratories Inc. (Warsaw) provides various testing services, including soil, plant and water analysis as well as microbiology, mycotoxin, aflatoxin and heavy metals detection.
www.watersag.com

West Pharmaceutical Services Inc. (Kinston) manufactures syringe plungers and IV system components, using compression molding.
www.westpharma.com

White Oak Industries Inc. (High Point) is developing and commercializing personalized immunotherapies for the treatment of infectious diseases, including Ebola and HIV.

WIL Research (Hillsborough) provides contract toxicologic pathology and histology services.
www.wilresearch.com

Wilmington Pharmaceuticals LLC (Wilmington) develops fast-dissolving dosage forms for established medicines.
www.wilmingtonpharma.com

Worldwide Clinical Trials Inc. (Morrisville) provides phase one through phase four drug development services to the pharmaceutical and biotechnology industries.
www.worldwide.com

Xanofi Inc. (Raleigh) manufactures nanofibers which may be used in surgery, wound care, regenerative medicine and other fields. Its first product, XanoMatrix, is a growth platform that mimics native tissue structures in order to simulate in vivo conditions.
www.xanofi.com

Xellia Pharmaceuticals USA LLC (Raleigh) manufactures anti-infective treatments, with an emphasis in lyophilized and liquid sterile manufacturing of small-molecule and biologic therapeutics.
www.xellia.com

Xenobiotic Detection Systems Inc. (Durham) offers patented bioassays to facilitate assessment of environmental and human health risks.
www.dioxins.com

X-in8 Biologicals Corp. (Chapel Hill) develops technologies to prevent and treat ischemia reperfusion injury in the context of organ transplant, myocardial infarction and stroke.
www.x-in8.com

Yukon Medical LLC (Durham) designs and manufactures pharmaceutical drug preparation and delivery devices with a focus on drug reconstitution.
www.yukonmedical.com

Zenalux Biomedical Inc. (Durham) uses biophotonics to develop diagnostic tools, including an optical system for the clinical detection of cancer.
www.zenalux.com

ZenBio Inc. (Research Triangle Park) provides contract research services and human tissues and cells for drug discovery, especially in the area of human metabolic disease and dermatology.
www.zen-bio.com

Zinfandel Pharmaceuticals Inc. (Chapel Hill) uses pharmacogenetics to improve prediction of risk for Alzheimer's disease and facilitate the development of effective therapies.

Zoetis Inc. (Durham and Maxton) develops and manufactures vaccines and medications for animal health. The site in Durham develops and manufactures high throughput automation biodevices for the poultry industry including in ovo vaccination technology. The site in Maxton develops and manufactures Coccidiosis vaccines for in ovo and post-hatch vaccination of poultry.
www.zoetis.com

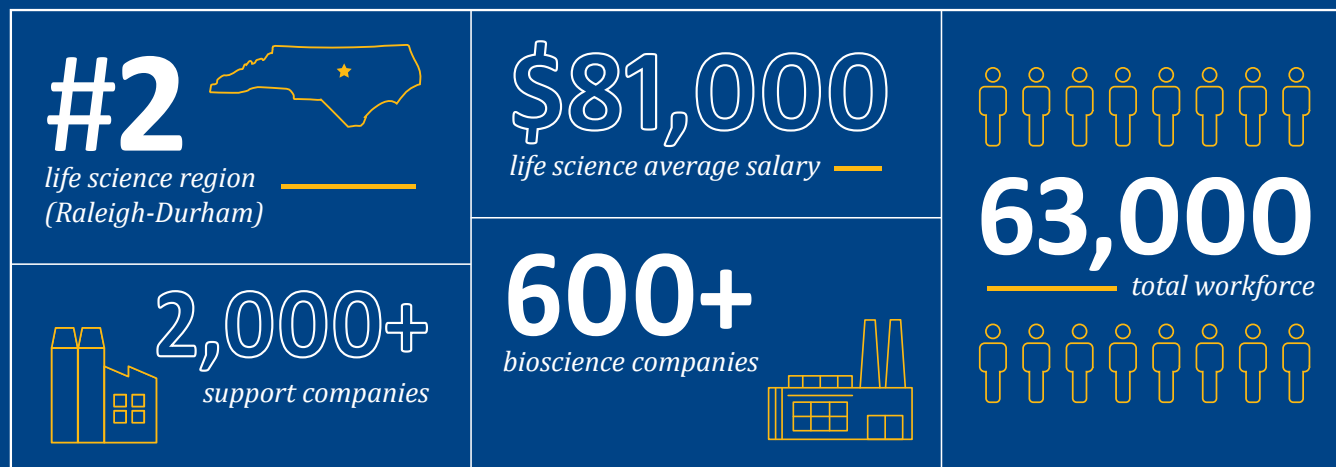
Zoion Pharma Inc. (Raleigh) develops drugs for veterinary disorders. Zoion's lead product is an epithelial sodium channel blocker compound to treat canine keratoconjunctivitis sicca (KCS) or dry eye.

Zor Pharmaceuticals LLC (Wilmington) develops and commercializes therapies for the treatment of cancer, with a focus on pancreatic cancer.
www.zorpharma.com

Zylera Pharmaceuticals LLC (Research Triangle Park) develops, acquires and commercializes prescription products and dietary supplements, specifically for pediatric and women's health.
www.zylera.com

North Carolina is home to 17 UNC System campuses, 35 private universities, 10 technology transfer offices and 58 community colleges. There are also seven research parks, 37 commercial wet lab/incubator sites and dozens of core labs offering a wide range of services and specialized equipment.

#SuperScience/ *North Carolina's life science industry*



Sources: Battelle Institute, 2014; JLL Sciences Outlook, 2015

Join us. ncbiotech.org/superscience

North Carolina Biotechnology Center

Offices in Asheville · Charlotte · Greenville · Research Triangle Park · Wilmington · Winston-Salem

Thank you to our 2016 Sponsors



North Carolina is known for its rich agricultural history, and Bayer is committed to cultivating the industry's future. Our role in the biotechnology sector focuses on improving agricultural crops such as cotton, canola, soybean and wheat. Partnerships with local universities and companies are what have made a North Carolina address so rewarding for Bayer.



BioNetwork provides high-quality economic and workforce development for the biotechnology and life science industries across North Carolina through education, training, and laboratory resources.



Wake Forest Innovations improves health through collaborative innovation between industry and the faculty and staff of Wake Forest Baptist Medical Center. We accomplish this through our three centers: the Center for Technology Innovation & Commercialization, which accelerates the development and commercialization of inventions; the Center for Industry Research Collaboration, which expedites access to specialized clinical and research capabilities; and the Center for Applied Learning, which promotes best clinical practices through experiential training. Visit us online at WakeForestInnovations.com.

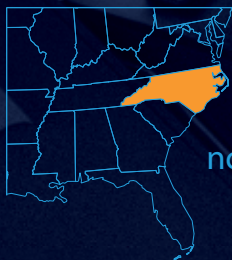
QUICKIE QUIZ:

Where can you find more than
600 life science companies with
63,000 highly skilled workers?

A growing life science economy
of **\$73B** a year? The birthplace of
contract research organizations?

The global epicenter of bioman-
ufacturing and ag biotech?

Look no further. **North Carolina:**
a global life science leader.



ncbiotech.org

North Carolina Biotechnology Center

Many thanks to our
sponsors for making
this directory possible

Bayer

BioNetwork

Wake Forest Innovations

North Carolina Biotechnology Center

ncbiotech.org/directory

